

BUILDING AND PLANNING

MR. COLE has also written the following, among other, books on monetary and economic problems, as well as a number of works on social and economic history, Socialism and kindred questions, some volumes of verse and detective stories. A number of these books have been written in collaboration with his wife, Margaret Cole :

Money: its Present and Future.
The Means to Full Employment.
Great Britain in the Post-War World.
Europe, Russia and the Future.
The Condition of Britain.
Studies in World Economics.
Economic Tracts for the Times.
The Principles of Economic Planning.
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British Trade and Industry, Past and Future.
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The Intelligent Man's Guide through World Chaos.
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Edited by G. D. H. COLE.

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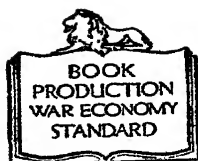
By

G. D. H. COLE



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PREFACE

THIS book is largely the outcome of work done by me as Director of the Nuffield College Social Reconstruction Survey from 1941 to 1944, and at the request of the Central Council for Works and Buildings, mainly in 1942 and 1943. I have been in some difficulty in writing it, not only because of the necessity of making no use of confidential data—all too much of war-time fact is still technically confidential, even where there are no real reasons against making it public—but also because the situation has been changing while it was being written and, still more, while it was passing through its successive stages of production under the slow and inhibiting conditions of war. I have had to deal in footnotes with developments that came too late for consideration in the text; but I do not find, in passing the final proofs, that this has mattered so much as I feared it would—largely because so many of the essential issues of post-war building and planning are still unsettled.

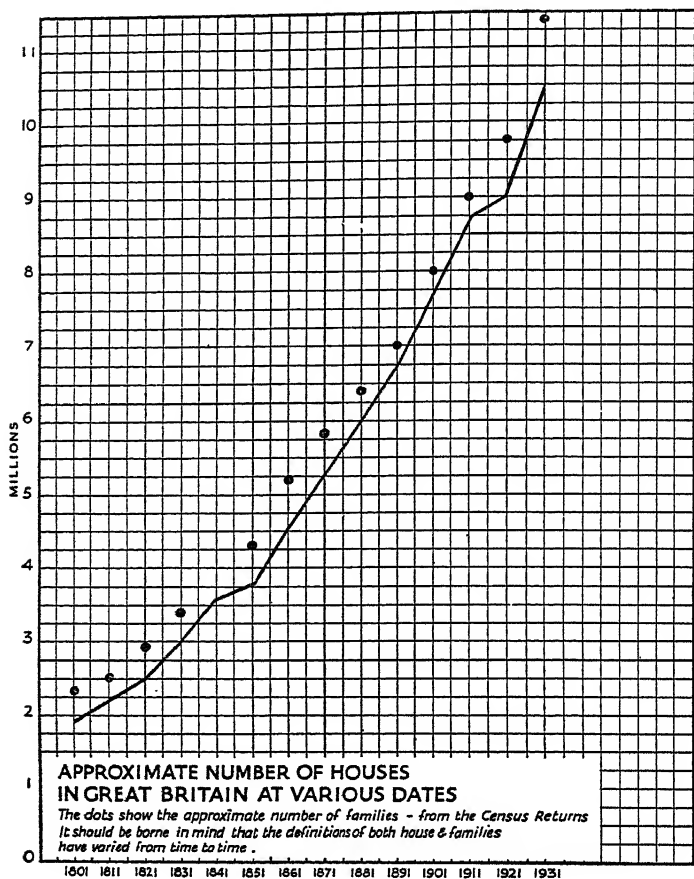
I wish to make special acknowledgment of help received from Mr. P. W. S. Andrews, Statistician to the Nuffield Survey, whose estimates of the demand for educational building have served as a foundation for mine; to Mr. N. B. Dearle, whose knowledge of the handling of building labour problems after the last war was of great value to me; to Mr. Ian Bowen, Statistician to the Ministry of Works and Buildings, and to Sir Ernest Simon, Chairman of the Education Committee of the Central Council for Works and Buildings; to Mr. Richard Coppock and Mr. H. Heumann, of the National Federation of Building Trades Operatives; and finally to Mrs. Broadley and other members of the Nuffield College staff. Naturally, neither Nuffield College nor any one of those to whom my thanks are due must be regarded as necessarily sharing the opinions which I have expressed.

I have made use of material from a booklet which I prepared for the Central Council for Works and Buildings on *Training and Recruitment in the Building Industry*; of various memoranda

prepared for the Nuffield Survey; and of parts of articles published in *Agenda* and in the *International Labour Review*. I have also taken the occasion to print in full my address to the National Trust at its annual meeting in 1943, to supplement the abbreviated version already published in the *Fortnightly Review*. I offer to all those concerned the appropriate acknowledgments and thanks.

G. D. H. COLE.

OXFORD, November 1944.



CHAPTER I

THE PROBLEM STATED

It is a matter of common agreement that in the coming period of reconstruction in Great Britain the building industry will hold a key position. This is not mainly on account of bomb damage, which will call for extensive and rapid measures of re-building in London, Coventry, Plymouth, Hull, Southampton, Liverpool, Swansea and a number of other heavily damaged areas. The actual destruction wrought by bombing constitutes quite a small part of the problem with which we shall have to deal—small even when allowance has been made for quite considerable re-planning of the affected centres. Nor is it only because of the arrears of normal building which have been piling up rapidly during the years of war—though these already constitute a much bigger problem than bomb damage and, when we add to them postponements of repairs and decorations and ordinary maintenance, make up a total which is already formidable and will be still more formidable before we find ourselves in a position to begin upon the task of catching up. These two factors are of great importance and would of themselves lead to a period of intense activity in the building industry as soon as labour and materials become available. But, if these things stood alone, the prospect before us would be one of expansion of the industry—expansion as rapid as we could make it—for a few years, to be followed by a sharp decline as soon as the blitzed areas had been re-built and neglected properties put back into tolerable repair.

There were in 1939 many who, looking forward at the prospect of declining population in this country, prophesied a sharp fall in the level of building activity before more than a few years had passed. They pointed out that, at the pre-war rate of house-building, we should soon be approaching the point at which there would be, on a purely statistical reckoning, enough houses to go round; and they saw signs that in many parts of the country the boom in private building was not far off saturation

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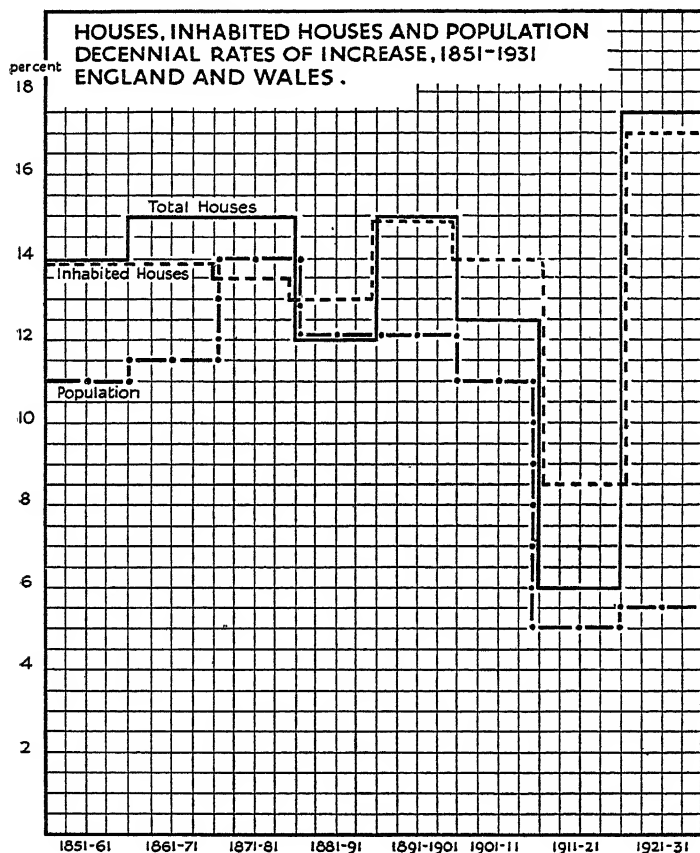
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failure to deal with their fundamental problems by remedial measures of the second or third order, gave evidence of this misfit; and so, in a less marked way, did the high level of unemployment, in good years as well as bad, in many places outside the areas scheduled as suffering from exceptional depression. The broad distribution of industries and population in Great Britain had been determined long ago by world forces and by the early development here of certain advanced manufacturing techniques based mainly upon coal; and there had been a notable failure to adapt this structure nearly fast enough to changes in the technique of production and in the character of home and foreign demand.

This is not to say that there had been no adaptation. What was known between the wars as the 'southward trend' of industry and population was essentially a process of adaptation to changing forces in the economic sphere. But this process had both encountered great obstacles and been allowed to proceed almost entirely without guidance in the light of any master conception of social or economic policy. The movements of population out of the older industrial areas into the developing centres of the newer industries encountered big resistances, both material and mental; and, with the solitary, belated, and not very considerable exception of the founding of certain so-called 'Trading Estates'—'Industrial Estates' would have been a much better name for them—almost nothing was done to ease the situation by measures designed to reduce the need for, and the economic advantages, real or supposed, of internal migration. No attempt was made, on more than an insignificant scale, to settle new industries in the areas which the decay of their established branches of production was leaving derelict.

Yet it was obvious that the social resistances to migration were very strong, and its effects highly unfavourable to the areas from which the migrants were removed. Emigration, internal as well as international, is always a selective process. The young and energetic find it easier to move than the old or lethargic: a single man or woman is much more mobile than the father or mother of a growing family: the able-bodied can move more easily than the ailing, and the adaptable more easily than those who have become set in a specialized skill or routine.

Accordingly, when an area is losing population as a result of migration, it tends to lose just those whom, from the standpoint of productive efficiency and of adaptability to alternative occupations, it needs most to keep. It is left with an abnormally high



proportion of the old, the ailing, the feckless, and the unadaptable; and it is severely hampered in its tasks of re-orientation to changing conditions both by abnormally high costs of maintaining its social services on behalf of these groups and by its

lack of the very persons who would be most helpful to it in dealing with these tasks. The strong psychological resistances encountered by policies of 'transference' of labour out of areas afflicted by heavy unemployment are not due only to individual reluctance to move. They rest also on a local patriotism which will not accept the condemnation of its homeland to the fate which transference makes even less remediable than before.

The basic factors underlying the change in the trends of industrial location and population movements can be quite simply stated. Manufacture in general has been becoming less dependent on proximity to coalfields as a result both of the development of easily transmissible electric power and of large economies in the amounts of fuel used up in many of the processes of production. Water supplies are more readily available in most places; and troubles over the disposal of smoke and effluent have become less. Modern methods of manufacture, leading to a greater differentiation of final products, have increased the attractions of proximity to large consumers' markets as against those of sources of supply in determining the most eligible locations for many of the finishing trades. Dependence on imported materials, due in some cases to the exhaustion of native supplies, has continued to pull some industries away from inland locations towards the ports. The development of machine techniques which have reduced the importance of skilled labour, except for a relatively small number of supervisory and key posts, has removed a part of the premium on traditional British craft skill, especially in the textile industries and above all in cotton manufacture; and in this case Lancashire also lost an important advantage as it became possible to reproduce artificially the climatic conditions which had helped in establishing British supremacy at an earlier epoch. In many industries, including those which are concerned largely with making capital goods, other countries, entering the field later than Great Britain, were able to equip their factories in accordance with new techniques which were introduced here but slowly as the great masses of capital invested in older kinds of equipment were gradually written off. A conservatism of age and tradition has lain heavily on many of the older British industries, not only because of the large amounts of capital

goods that would have had to be scrapped in order to bring them up to date, but also because their economic structure, as well as their material equipment, had set in the mould of an earlier period and reflected productive conditions which, in the world of to-day, are as obsolete as a Newcomen engine or a horse-bus. Indeed, these organizational and psychological obstacles to renovation have been much more important than the merely material obstacles.

The point which I am making is that Great Britain, well before 1939, already stood in need of extensive re-planning and re-building in order to fit its structure—its industrial and demographic ‘set-up’—to the requirements of the modern world. Quite apart from such needs as the clearance of slums, the replacement of obsolete dwellings, the diminution of urban overcrowding, and the raising of housing standards in the countryside and the mining areas as well as in the towns, there were grave faults in the entire ground-plan of British urban and rural life. Many factories and other non-residential buildings—including a great many schools and most farm-buildings—were obsolete and in need of replacement: many of the factories were in the wrong places, and so were many of the houses, schools, public service buildings, shops, churches—anything you choose to name—for people must live and work in reasonable proximity, and a maldistribution in one respect implies maldistribution in others. Nor could it be taken as secure that the existing faults were being gradually corrected by the free play of economic forces. Far from it. For one thing, the conditions under which house-building was carried on tended in certain important respects to perpetuate and to aggravate the evils they should have been designed to put right. House-building by public authorities tended to take almost exclusively the form of erecting new houses and housing estates round the circumference of existing urban centres, without regard to the possibility that it might be more desirable, both economically and socially, to provide for the re-location of a part of the congested populations elsewhere. The localized responsibility for house-building, which often meant the splitting up of what was in effect a single town among half a dozen separate housing authorities, and in some cases many more, led

directly to this unfortunate result. All the efforts of the reformers who for two generations have preached against the prevailing tendency towards urban conglomeration have resulted in the building of only two small new towns; and the effort involved in the creation of Letchworth and Welwyn has been so terrific that nobody seems to expect any third venture to be launched unless the conditions are fundamentally altered.

No other outcome was possible, in the absence of any sort of co-ordination between the forces responsible for house-building over wide areas, or between these forces and the forces responsible for industrial development. The industrialist, save in a very limited number of special cases, must put his factory where he can feel assured that there will be, near at hand, an adequate supply of the kinds of labour he requires. No doubt, in certain branches of industry he must plant his factory on top of the raw materials he proposes to use, and must then take steps to attract the requisite labour into the area, if it is not already there; and, where this is done, somebody—whether it be a local authority or the factory owner or some other agency, public or private—must assume the responsibility of building houses for the workers, of providing essential services, and, up to a point, of seeing to it that the amenities of life are not wholly to seek. In certain cases, a very big manufacturer may even decide to take the responsibility of building a factory and a town together, and of bringing his workers with him to a place where there is no suitable supply of labour already to be had. But cases in which industries are tied down to raw materials, or to coal, are getting fewer: they exist mainly in the preliminary stages of manufacture, which employ a diminishing proportion of the total labour force. Corby is a recent example of a new industrial town created on the site where its essential material is found. But such cases are exceptional; and undertakings of this order are usually beyond the means of all but the largest employing firms. Nor are they without grave disadvantages when they do occur. Nearly everyone agrees in condemning the town which is exclusively dependent on a single industry and is therefore exposed to sheer disaster if that industry falls into difficulties. Apart from this, the single-purpose town suffers from the further disadvantage that, wherever its occupation is

subject to either seasonal or cyclical fluctuations of any magnitude, it is bound to experience large ups and downs of fortune, and to be wasteful in its use of labour because of the necessity of keeping a high labour reserve to cover the peak demand for its products.

Apart from such exceptional cases as I have mentioned, the employer's dependence on an adequate supply of suitable labour usually induces him to set up his factory, if he can, in an area in which there is already a large reservoir of the kinds of labour he proposes to employ. This is the biggest factor in bringing about the 'localization' of industries—the aggregation in the same neighbourhood of factories using similar kinds of labour and requiring similar skills and dexterities; and what it means is that, as the settlement of new factories or the enlargement of existing factories in a place increases the total demand for labour of the kinds required, fresh workers are attracted into the area by the prospects of employment which it offers, irrespective of the social or economic desirability of additions to its size and population. Thus, big towns which are the homes of expanding industries grow bigger by a process of agglomeration which is at bottom illogical. Factories are set up in them because of the labour that is already there; and then more labour has to be brought in to meet the increased demand.

It might be supposed, at first thought, that things would work out the other way round, and that employers would tend to put their factories where they could find surplus labour already on the spot, rather than where they would have to compete actively with other employers demanding labour of the same sort. For example, in all the coalfields and in all areas which specialize extensively in the heavy industries the demand for women's labour tends to be low, so that there is on the face of the matter a surplus of women available for employment. But it is by no means the common experience that firms in want of a high proportion of women workers prefer to settle in areas of these types. I am not saying that this never happens; but clearly it does not happen often, or the marked disparity between the proportion of women employed in these and other parts of the country would disappear. In general, the employer who is looking for a factory site will not regard it as an advantage that there are near by large numbers of women who have not been

accustomed to factory work. Quite the reverse. If he wants a large number of women to mind his machines he will usually make straight for an area in which the level of women's factory employment is already high.

There was a time when few people saw anything wrong in all this, because the growth of huge towns was a source of civic pride, and not of disquietude. Men were proud if their town was growing faster than its neighbours; and the growth in size and population was regarded as the surest outward and visible sign of prosperity. So of course it was, in a sense, as long as the expansion of employment continued. It was only when big towns found themselves with large bodies of local unemployed, but still drawing in labour from areas where unemployment was even heavier, that doubts began to arise about the blessings of unlimited expansion. There were, of course, always places that did not wish to grow—mainly residential suburbs and holiday resorts which prided themselves on keeping themselves select—and there were industrial centres—mainly smallish towns—which lived in terror of 'foreign' employers coming in and starting new industries, and thus bidding up the price of the local labour. But, until quite recently, these were exceptions. Most places wanted to grow, and most of those who directed their fortunes had never asked themselves whether there might not be an *optimum* size beyond which further growth would bring more disadvantages than benefits.

In fact, however, the process of large-town agglomeration has had, for a long time past, grave economic and social disadvantages, both from the standpoint of the places which have increased in population and from that of the areas from which population has been withdrawn. It has left acute problems of maladjustment of population in the areas from which people have moved—for, as we have seen, usually the younger and more energetic move, leaving the older and weaker behind. The British countryside has long suffered from the consequences of selective emigration to the towns; and more recently some of the older industrial areas have come to suffer in the same way. The high average age of the agricultural workers has long been a matter for comment; and now the depressed industrial districts are experiencing the same adverse selective process. At

the receiving end, the process of migration has resulted in a planless growth of the attracting centres; for the growing industries have put their factories pretty well wherever they have pleased, leaving the towns to adapt their house-building to them, or merely to let the house-builder and estate-developer do their worst. Usually there has been, until quite recently, hardly any attempt at planning industrial and residential development together on lines calculated to secure the best results in either productive efficiency or amenity of living. Zoning is not a newly discovered art; but in the history of British urban development since the Industrial Revolution the instances of its successful practice are few.

More recently there has been added to these two drawbacks a third—that our great towns have become altogether too big for good government or satisfactory living, and in some parts of the country have so run one into another as to produce an inextricable tangle of urban areas, with no real frontiers and no possibility of a coherent sense of community among their inhabitants. This has occurred, for example, over a large part of South Lancashire and in the West Riding of Yorkshire—to say nothing of Greater London's "six counties overhung with smoke". The reverse side of this process is seen, not only in rural depopulation, but also in the complete stagnation of many of the smaller towns, which badly need new and progressive industries to wake them up, and to give their inhabitants—actual and prospective—the means to a wider life.

In short, reliance on the free play of economic forces to bring about a right distribution of industries and population has been largely responsible for many of our worst and most intractable social and economic problems. So far from producing a balance, area by area, between industries and employments of different types, it has led to an excessive dependence of some large regions on a very narrow range of industries, which both create an unbalanced demand for labour when they are active and engender desperate depression as soon as anything goes wrong. The relative demand for men's and women's labour, for skilled and unskilled labour, for heavy and light labour, differs very greatly from area to area, without any relation to the structure of the local population, save to the extent to which

it has been twisted to fit in with the distorted demand. Girls from South Wales take to domestic service, not because they have a special fancy or fitness for it, but because there is, except in war-time, a regional shortage of women's jobs. Dundee, on the other hand, has long had a surplus of women's over men's jobs, and Liverpool too many unskilled jobs in relation to the openings for skilled labour. In addition, the freedom to locate industry at will has brought into being whole towns almost entirely dependent on a single firm or combine: so that, if this one employer goes bankrupt or decides to move elsewhere, the entire neighbourhood is impoverished and most of it thrown out of work. In face of contraction in many of the older industries and of what is called 'rationalization' under the auspices of great combines or cartels, this has happened again and again in recent years; and there is every reason to suppose that, if we continue to let matters alone, it will happen on an even greater scale when industry gets down to reorganizing itself after the war.

Yet there are still many who argue that it is too dangerous to arm the State, or any body acting on its behalf, with authority to control the location of industry or to undertake any form of publicly organized planning of economic development. The entrepreneur, we are told, knows best where it will be most advantageous to put his factory; and any attempt to dictate to him, or even to influence his decision except in the mildest of ways, will inevitably reduce the profitability of industrial enterprise and, by reducing the prospect of profit, damp down investment in the means of production and so cause less labour to be employed and fewer goods to be produced. When the Barlow Commission, shortly before the war, called for evidence on the desirability of action to control or influence the location of industry, the pundits of the Board of Trade presented it with a complete exposition of this familiar doctrine of internal *laissez-faire*. The employer knows best: he must be left to decide—even if the consequences of leaving him to decide in the past are visible all around us in the spoliation of good agricultural land, the ruin of derelict industrial areas, and the vast social problems of measureless agglomeration in our great cities with their scurrying populations spending a good part of their lives in a frenzy of criss-crossing journeys to and from work.

Of course, behind this opposition to any attempt at planning the distribution of industries and population lies, not the belief that employers do in fact always decide for the best, but the fear that such planning may prove to be but the thin end of an enormous wedge. Nobody really believes that most employers, in setting up or developing a business, do in fact decide on perfectly rational grounds where to put it, or can be in a position so to decide. Nobody will deny that, besides an element of rational calculation, which is usually largest in the case of big concerns owning a number of establishments, there is a great deal of sheer haphazard in the placing of factories in one place or another. A man starts on a small scale in his native town, and strikes lucky: he expands on his existing site, if he can: if he cannot, he probably looks out for a site somewhere quite near—near enough for him not to have to uproot his workers from their homes, or be at the pains of gathering and training a quite new labour force. That is how most new businesses—for most new businesses are small businesses—begin and grow. Or, if a man or a syndicate is looking for a site and is not predisposed to any particular locality as 'native', very often the choice is made much less on rational economic grounds than by settling either where other firms of a similar sort have gone already, or where the chief promoters who expect to be active in the business would prefer to live—which means, most often, somewhere in Greater London. There is a very large irrational element in most choices of location; and in a great many cases there is in effect nothing that can be called a conscious choice. Most employers do not 'go': they stop, without considering the matter, pretty nearly where they happen to be.

For all this, it may no doubt be true that the man who is thinking of putting up a factory might resent being told where to go, and might, if he went where he was told to go and then did not prosper, attribute his lack of success to the authority which had dictated to him where his factory should be. Undoubtedly, this would happen: it would be against human nature for it not to happen. Again, it is possible that a system of telling potential employers where, and where only, they would be allowed to put their works would deter some of them from putting up any works at all. But no one that I know of is sug-

gesting that the employer should be ordered about in this way. The most that is proposed is that certain areas should be closed to the establishment of new factories except under special licence, that special encouragements should be given to the setting up of factories in areas where they are plainly needed, that certain areas should be scheduled or zoned for certain types of industrial development and certain other areas protected from the encroachments of all, or of unsuitable, industries, and that, to a certain extent, the potential employer's free choice should be limited. The effect would be, not to force upon him a single, predetermined location, but to leave him a large choice both of areas and of suitable sites, while preventing him from acting in ways which would either add to the lack of industrial balance of already unbalanced areas, or destroy the utility or amenity of a neighbourhood, or pile up more population in an already congested district, or create insoluble traffic problems, or in any other way commit a manifest 'nuisance' to the public detriment.

Of course, it might be found that no available system of deterrents and inducements which followed these lines would succeed to induce potential employers to set up in certain areas industries of the types deemed to be requisite for their good health and economic balance. This would be very likely to be the case over the country as a whole, the volume of economic development fell short of what was needed to secure conditions of 'full employment'—as it did during the period between the two wars. If there are not enough openings for employment to go round, nothing can prevent some areas from being short of them: nor can one expect the shortage to be evenly distributed. It is precisely when the total level of employment is low that the more prosperous areas—those which are already the principal homes of the expanding industries—exert the strongest pull. When conditions of 'full employment' exist, there are many more cogent reasons for accepting a location in an area which is relatively depressed—that is, in which there is less pressure on the available supply of labour. A policy of 'full employment' consciously maintained by State action and supported by appropriate financial measures¹ can be relied upon to make a po-

¹ For a discussion of such a policy see my book, *The Means to Full Employment*, published in 1943.

of controlling the location of industry very much easier to work, and to reduce to zero the danger that such control will actually lower the total of new investment. 'Full employment' means profitable openings for industrial development; and under such conditions, even if one entrepreneur were foolish enough to be choked off, there would be no lack of others ready to take his place.

The control of industrial location is one aspect of planned development of the distribution of population. It is a vitally important aspect; for the pattern of work determines for the most part the pattern of living, and where we put our industrial establishments, there, or near by, will be our people also. Location is, however, not only a matter of putting an industry in South Wales or on Tyneside rather than in Greater London. It is also a matter of putting it, in the chosen area, on this or that particular site. This kind of particular control is, of course, what is ordinarily envisaged in town and country planning. The town or country planner has no power to bring industries into the areas over which he plans—though he may have a limited power of keeping them out. His essential power is to lay down that, if an industry of a particular type wishes to settle in the planned area, it shall settle in one part of it rather than another. He 'zones' certain parts of the area for residential, others for commercial, and yet others for industrial, development. He sets out to protect certain parts from any sort of building, and to reserve others for purely agricultural use. He distinguishes, moreover, between industries, applying one regulation to those which belch forth smoke, or generate noise or smell, or produce noxious effluent, and a different regulation to industries which can be held harmless in these respects. He tries to reconcile the need for keeping down the distance between home and work with the protection of home from the unpleasant effects of undue nearness to the factory zone. He plans for amenity as well as for economy, and weighs both social and economic considerations in the balance of his art.

A third of a century has gone by since Great Britain enacted its first Town Planning Act, but not very much more than a decade since the country, as well as the town, was first deemed fit for some measure of planning. Even for the towns, planning

powers have been granted but hesitantly and extended but recently to cover areas already built up; and in practice town planning has been a half-hearted affair, held back above all by the high costs of compensation in which the law has involved any local authority that has attempted to make much use of its powers. The Control of Ribbon Development Act, directed against what was universally recognized as a crying evil, was rendered nine-tenths abortive by disabling financial provisions; and in general the notion that property rights come first and the public interest a bad second has made hay of the town planners' aspirations. Moreover, town planning has been conceived, as far as practical doings under it are concerned, mainly in a negative way. It has been aimed at checking further spoliation, rather than at accomplishing positive results; and its utility has been further limited by the splitting up of the power to plan among a large number of authorities, with only permissive powers of working together: so that it has been within no one's means to plan the co-ordinated development of whole regions which need to be dealt with together, or even, in many cases, to envisage the planning of what is virtually a single town, even if it possesses no unified municipal government.

There have been, no doubt, Joint Town Planning Committees, representing a number of neighbouring local authorities; and some of these have done good work. But most of them have been no more than advisory bodies, and there has been, until the last year or two, nothing to prevent any single authority from refusing to collaborate, even in an advisory way, with its neighbours. I am not urging that the smaller authorities ought to be deprived of town-planning powers. By no means. The small authority, urban or rural, should have much to do in the field of planning with the uses to which its territory is to be applied. But the authority covering only a small area cannot do this effectively if it has to act in isolation, and if any of its neighbours can permit or encourage forms of development which may make nonsense of its plans. What is the use of keeping some industrial or housing development away from an area which it is desired to preserve, if by shifting a few hundred yards the developer can locate himself within the jurisdiction of a more complaisant authority? Little plans for little areas

can be effective only when they are devised in accordance with the conditions laid down in master plans covering much larger areas. This truth is faintly recognized in existing legislation, and is coming to be more clearly recognized now that the new Ministry of Town and Country Planning is beginning to think along regional lines. But there is still no clear distinction drawn between the essentially regional function of framing a master plan for the development of a wide tract of town and country and the essentially local function of working out the details in each separate area and of supervising the actual execution of the plan. Town and Village Planning are one thing, and Regional Planning is another; but they are still hopelessly confused in most people's minds and in the current legislation under which both kinds of planning have to be carried out.

There is a further source of confusion, which is less avoidable because it arises out of a real complexity of the problem. What is town and country planning *for*? Asked that question in such a way as to require an immediate answer, some advocates of planning will stress the aesthetic aspects of planning—the need to preserve beautiful country from desecration and beautiful buildings from being pulled down, and the need to insist on higher aesthetic standards in new building and on more symmetry in the planning of streets and districts; whereas others will answer mainly in terms of planning for convenience and economic advantage. Some will protest against the vandalism that makes havoc of natural beauty, and others against the alienation of high-class agricultural land. Some will think primarily of boulevards, avenues, parklands, and green belts, and others of better roads and transport services, better drainage and water-supply systems, and, perhaps, of protecting the better-class residential districts against the incursions of the poor. It is right that all these considerations, except the last, should rank high among the objects of town and country planning: what is amiss is that so few people, or at all events so few members of local authorities, seem able to think about them together in a reasonably balanced way. Town and country planning has both utilitarian and aesthetic purposes; and sometimes these march together, and sometimes they conflict. It is one of the marks of good planning to reduce such conflicts to the lowest

practicable point, which can be done only if all the different considerations are taken into account in the first formulation of the plan. That is why town and country planning eminently calls for the services of a particular kind of expert planner, of whom Professor Abercrombie is at present the outstanding example. The designer of buildings, the municipal surveyor and engineer, the land expert, the transport expert, and many other specialists have to play their several parts; but there must be someone in at the start whose job it is to envisage the plan as a whole, and also to envisage its relation to wider plans and to the larger economic and demographic factors which are involved in it.

The town or country planner, whether he is operating over a wide or narrow field, is concerned with the making of a physical plan of land use. His domain is a particular stretch of the earth's surface, of which any part may be best devoted to agriculture, or to park or forest, or to some sort of building, residential, commercial or industrial, or to some service use, from a sewage farm to a playing field. Manifestly, he cannot plan except in the light of some conception of the numbers of people who will be living or working in the area, the types of agricultural and industrial development that are to be expected, and the standards of living that are to prevail among the inhabitants. Usually, however, the planner can have no accurate knowledge in any of these matters. He cannot know what industries will wish to come and settle down, or how many workers such industries will attract, or what wages they will pay, or what policies the State will follow in the development of communal services or of agriculture, or in aiding the local authorities to add to the amenities and utilities of the district. He has therefore to make his plans elastic, in order that they may not be upset whatever course within wide limits development may take.

That is why nearly all city plans are laid down to provide for very big increases of population, even though everybody knows that the population of Great Britain will very soon be falling quite fast. It seems absurd that the town planners of a small number of great towns should be drawing up plans for locating, in these towns alone, an aggregate population much larger than

the total population of the country. But, under the existing conditions, what else can they possibly do? After all, their town may grow at a great rate, even if total population is declining over the country as a whole. Their plans will remain workable, even if large areas which they have zoned for housing or for industrial development remain unfilled; whereas if they plan for too small an increase their entire plans will be thrown into confusion when, in this respect or that, their estimates come to be exceeded. They must plan, under present conditions, for the absolute maximum that seems even possible in each place; and inevitably the adding up of a number of local plans made on such a basis produces a fantastic result.

The local and regional planners can afford to plan more realistically only to the extent to which they can base their anticipations upon wider plans. If there is a concerted regional plan, the local plans can be made with much more approach to realism than is possible where each locality plans in isolation from the rest. The total possible population for the West Midlands thirty or a hundred years hence is very much less than the aggregate of the total possible populations of all the separate towns and districts in the West Midland Region; and to the extent to which any regional plan is laid down for influencing or directing the economic development of the area as a whole, the range of doubt for each town and district within it is narrowed. Similarly, if there exists anything in the nature of a national plan for the distribution of industries and population between the regions, the range of doubt for each region becomes less, and the regional planners can work less in the dark than they are otherwise bound to do.

A national plan cannot, however, be at all closely analogous to regional plans. The regional planning authorities must in the nature of the case be mainly considering what is likely to happen under the impact of forces outside their control, rather than what they can cause to happen. They can, no doubt, do something by their own policies to attract or to repel industry and population; but their powers in these respects are limited. The amount of industry and population they get will in the main be settled for them either by the operation of uncontrolled economic and social forces or by the conscious action of national policy-

makers. On the other hand, if there is a national policy, those who frame it will not be merely studying the movement of economic and social forces, but also endeavouring to influence this movement. They will be attempting consciously to bring about a distribution of industry and population different from that which would occur apart from their action, wherever they think that the latter would engender unfavourable social consequences. They will need, at every point, to weigh carefully the probable effects of their intervention, economic as well as social; but they will be, within the limits set by these considerations, autonomous agents of a creative social policy to which the regional and local planners will have to conform.

This is the point at which what is ordinarily called 'physical planning', the special concern of the Ministry of Town and Country Planning and of the regional and local bodies which it exists to co-ordinate and in some measure to direct, runs into that wider kind of planning, ordinarily called 'economic planning', with which it is often confused. It is so important to get both the difference between these two kinds of planning, and the relations that ought to exist between them, clear that a discussion of this issue claims pride of place. When that source of confusion has been got out of the way, we shall be in a better position to see both on what lines the physical planning of Great Britain needs to be developed in the immediate future, and how in its turn physical planning is related to the planning and organization of the building and civil engineering industries, which are the principal executants of its projects.

This amounts to saying that the post-war position both of town and country planning and of the constructional industries will depend, in both the long and the short run, on the policy adopted by the Government in dealing with the major problem of the distribution of industry and population. If the Government should decide, leaving the future structure of industry and the movement of population to the same blind forces as have governed them in the past, to confine its activities, including whatever action it may take to stimulate private enterprise, to mere assistance in the re-building of bombed areas and in catching up, in a purely quantitative sense, with the arrears of construction and maintenance that have accumulated during the

war, there will in all probability be a short-lived boom in building and in the industries related to it, requiring a large and sudden increase in the numbers employed in these industries, but this boom will be followed by a severe slump as soon as the urgent work of 'making good' has been done. The 'need' for a large amount of further construction will remain; but that 'need' is not likely, under such circumstances, to translate itself into terms of continuous effective demand. No doubt, if, without attempting to plan the re-distribution of industry and population, the Government does follow a practical policy designed to maintain total employment at a high level, the constructional industries, including building, will share to some extent in the beneficial effects, and the fall in constructional activity will be much smaller than it will be if the Government repudiates the responsibility for maintaining 'full employment'. But even a global policy designed to maintain a large demand for labour will hardly prevent a building slump unless it is accompanied by special measures for cheapening the costs of improved housing accommodation to the consumers. Houses are too dear for most people to be willing or able to afford good ones as long as there are bad ones to be had at a much cheaper rate, or as long as they can crowd up together to an extent that is recognized to be socially undesirable. Either the costs of housing must be drastically brought down, or housing must be heavily subsidized, or bad housing and overcrowding must be allowed to continue, to the accompaniment of renewed 'depression' in the building industry as soon as the edge has been taken off the post-war shortage. On the other hand, if the Government's plans for post-war physical planning and development are based on a real attempt to adapt the entire structure of Great Britain to modern standards of amenity and to the economic requirements of the new world of technical progress in which we shall have to live, there will be plenty of work for an expanded building industry, not merely for a few years, but for as far ahead as it is at all profitable for us to attempt to look.

Moreover, the decisions which the Government takes on this major issue will affect the kinds as well as the amount of building that we shall need to attempt during the years immediately after the war. In London and in other seriously damaged areas, there

will be a large need for immediate re-housing ; for it is beyond question that great masses of people will flock back at once to the places which they have left under stress of war, including not only evacuees and other refugees, but also war workers of many kinds and returning soldiers, as fast as demobilization sets them free to go where they will. Over and above this there will be in many places in which people have been living perforce under grossly overcrowded and uncomfortable conditions an urgent demand for better accommodation ; and there will also be an exceptionally large number of new families coming into existence as a result of deferred marriages and the return of absent husbands who have married during the war. All these people will be in a mood to clamour for houses in the places where they want immediately to be, mainly irrespective of the prospects of employment which these places are likely to offer in the future. If the general post-war policy is to leave our towns, as far as Government action is concerned, broadly as they are, or as they were in 1939, and once more to rely on the play of 'free enterprise' to settle how large they are to be when things settle down, there will be a terrible danger, under the pressure of all these people looking for homes, of getting great numbers of houses and other buildings put up in the wrong places—that is to say, in places where either the economic prospects of employment are bad in the long run, or where, for social reasons, it is highly desirable to disperse populations rather than to allow them to settle down in overgrown agglomerations all over again.

As against this, if during the period of reconstruction immediately after the war we are in a position to work on the basis of well-canalized plans for bringing about a more satisfactory distribution of industries and population, in better accord with current and prospective social and economic needs, it will be possible to tackle the immediate problems of re-housing in a radically different way. It will not, I think, be possible or desirable to attempt to prevent people from flocking back to their old home-districts, irrespective of the economic conditions and prospects of these places. If, however, we are deliberately planning, as a long-term policy, to reduce the populations of some areas and increase the populations of others, with a parallel re-distribution of industries based on a considered view of

economic and social advantage, it will be possible to envisage the re-housing problem, or a substantial part of it, as an essentially temporary problem of finding somewhere for people to live while the longer-run readjustments are being made ready. In that case, clearly the right way of providing for many of those who crowd into areas unlikely to afford permanent employment for all of them will be, in part, by the erection of temporary structures meant to last only for a short period and to be cleared away as soon as the intended policy of re-distribution can be carried into effect.

It is the more important that it shall be practicable to handle the problem in this way because, whatever is done, the rate of new building by normal methods is bound to remain low for some time after the war is over. The low point to which the building industry has been reduced under the stress of war, and the necessary absorption of a large proportion of the available labour force in urgent repair work after the war ends, combine to make impracticable a speedy return to a large volume of new construction. But a policy of temporary housing will be tolerable only if there is good assurance that it will be temporary; and such an assurance can be valid only if there exists an authoritative long-term plan of development involving a sensible re-distribution of industries and population.

The plans so far announced by the Government combine provisions for permanent and temporary housing. For permanent house-building the target set is no higher than that of having 300,000 new houses built or building within two years of the end of the European war. It will be appreciated how small this number is in relation to the need when it is compared with the actual rate of building during the years before the war. It is much less, for the two years taken together, than a single year's output at the pre-war rate. In other words, so far from making any contribution towards the clearing off of war-time arrears or the replacement of bomb damage, it will fail to keep anything like pace with the ordinary current demand for new houses needed to replace dwellings demolished and to provide for the normal increase in the number of households.

Whether or not this slow start with new house-building is unavoidable we shall be able to see better at a later stage, when

we have examined the plans put forward for the recruitment and training of building workers and considered how far the supply of satisfactory houses can be speeded up by pre-fabrication or the use of new methods of construction. For the moment we may be content to observe that even if it proved practicable to build, during the first two years of peace, twice as many dwellings for permanent occupation as the Government proposes—and to get these dwellings not merely started but ready for occupation by the end of the two years—there would still be evident need for a large-scale supplementary programme of temporary housing, merely to get roofs over the heads of a great number of persons who would otherwise be left without any homes at all.

The Government has already announced that it proposes, side by side with its programme of permanent house-building, to proceed urgently with an emergency programme of temporary building. It has not given a definite number of dwellings to be made ready under this part of its plan, but has indicated that it will be on a fairly large scale—possibly up to half a million—and that the houses erected under it will be and will remain strictly Government-owned. They will be, in the main, pre-fabricated along factory lines, and the work of preparing the sites will be taken in hand by the large organization which the Ministry of Works has at its disposal during the war for site-work in connection with war factories, aerodromes, and other war-time works of large-scale construction. This emergency organization will also be available for site-work in connection with permanent housing schemes, and will be used even before the war ends in getting sites ready for both temporary and permanent housing in order to avoid delays in making a start on the actual building as soon as labour and materials can be made available.¹

¹ In addition to announcing its intention to provide temporary houses, the Government in the spring of 1944 put on view a model of the type of house which it is proposing to build. This was only a preliminary model; and it is already certain that considerable modifications will have to be made. The Government's model house, when it was shown to the public, was in general praised for its fittings, but condemned both for its lay-out and for its overall size. It had no back door: it was so arranged that all the dirt of those entering was bound to be conveyed into the living-room; and its rooms were too small. As I write, some changes have already been announced—a back door, and an im-

It is obviously right, if there is to be temporary house-building, that the dwellings erected for temporary occupation shall remain in Government ownership. If private persons were allowed to own them, the difficulties of getting them removed when the need for them had passed would be insuperable. Even if they were owned by local authorities, similar difficulties would arise in areas controlled by sluggish or reactionary Councils, and it would be impossible to treat the supply of emergency dwellings as a mobile supply, which could be removed from one place to another in accordance with changing local needs. For example, if it were decided to build a new town, or to carry out extensive demolitions of old houses in connection with a re-planning scheme, it would obviously be useful to move temporary houses into the area for use during the period of permanent construction. This implies that the temporary houses, or a good many of them, will be so constructed as to be movable from one place to another; and it is to be presumed that this is what the Government has in mind.

Many people have hitherto been afraid of giving any encouragement to plans for temporary re-housing because they have feared that structures designed as temporary will in fact be allowed to remain permanently in use. It is obviously necessary to take stringent precautions against this, and to erect temporary dwellings under such conditions as will put the greatest practicable difficulties in the way of their retention beyond a limited period. Wherever it is confidently anticipated that permanent houses will be needed, special care should be taken to avoid erecting the temporary dwellings on sites that are destined for permanent housing. It will, indeed, be best to erect them, wherever possible, on sites that are definitely meant *not* to be used for permanent residential building—for example, in places which are scheduled for reservation as open spaces or for public buildings or for commercial or industrial development. I am not suggesting any radical change in the improved arrangement of the interior, but no increase in the overall size. If I comment further now, what I say may well be out of date before my words appear in print. It is only worth while to say that temporary houses constructed mainly of steel—as, in view of timber shortage, most will almost certainly be—will have enough disadvantages without being cramped. Gadgets are no substitute for adequate space and reasonably convenient lay-out. The first design of the 'Portal' house can be, and must be, considerably improved upon before it can be regarded as reaching a tolerable standard.

ment in post-war planning schemes. It will thus be natural to get rid of the temporary buildings as soon as possible in order to clear the land for permanent use.

The need for temporary dwellings will arise especially where there is a need to re-house immediately a population larger than is expected to remain permanently in an area. The degree to which anticipations can be made on this point will obviously depend in a high degree on the extent to which definite plans are being made for a re-distribution of industries and population; for even if the population of a particular place seems likely to fall in the long run in the absence of any plan for its regulation, the prospect of such a fall—uncertain as it will appear—will not deter those who need homes in the meantime from demanding them, or from asking for permanent dwellings, on the assumption that they themselves will not need to move out of the area, whatever may happen to others.

The case for temporary buildings is thus closely bound up with the major decision about post-war planning policy. If there is to be a big plan of economic and social reconstruction, involving large internal migrations and extensive changes in the location of industry, it will be the best thing in a good many instances to provide at first temporary dwellings for those who flock back to the places with which they are most familiar, and then discover gradually that these places will not be in a position to find them all jobs. The roots struck will be less deep, and the subsequent movement easier to bring about, if a good many people are in temporary homes than if they have settled down in permanent homes which they will be reluctant to leave. On the other hand, if there is to be no major plan for the re-distribution of industries and population, it must be assumed that post-war housing too will continue to be a haphazard affair of responses to immediate local demands, without reference to what is desirable in the longer run, and that local authorities and private speculators will erect houses under much the same conditions—though not necessarily in the same proportions—as before the war. Under such conditions, there will be strong pressure to put up permanent houses, which alone look at all likely to be an economic proposition; but the need for temporary dwellings will not be avoidable, at any rate in the heavily

damaged areas. PUBLIC opinion, however, is likely to be much more favourable to temporary housing if it is linked up with long-term plans for the provision of permanent dwellings elsewhere—on new sites or in altogether different areas—in connection with properly thought out plans for the development of alternative centres of population and the comprehensive re-planning of obsolete and unsatisfactory urban areas.

The case for some temporary housing is clear, the necessity of it inescapable. But it is evident that temporary houses are not to any extent a substitute for permanent houses, and however many we may build, the need for permanent houses will not thereby be diminished by a single unit. The temporary houses are required both because we cannot build permanent houses fast enough to meet the immediate need and because people whose houses are to be pulled down must have somewhere to live while new houses are being built for them, to the extent to which the new building is to take place on the cleared sites. We can, however, leave out the temporary houses altogether when we come to estimating how large the post-war housing programme as a whole ought to be. The need for permanent houses is to be measured by the prospective number of families, rather than individuals, by the extent to which we mean to replace obsolete and unsatisfactory dwellings and to pull down whole groups of buildings in connection with the re-planning of our towns, and by the amount of movement of population that we expect in such forms as will mean building additional houses in certain areas.

When we have estimated the need for houses—roughly, as best we may—and considered the magnitude of the other claims which the building industry will have to meet after the war, we shall be in a position to attempt to answer the question—At how big a building industry ought we to aim? This is, of course, a matter not only of the total amount of building we propose to undertake but also of the period over which the carrying out of whatever programme we adopt is to be spread. Some needs will not wait a moment longer than they must wait owing to the sheer impracticability of meeting them sooner; and the scale of these needs sets a minimum level to which we must try to expand the capacity of the building industry as fast as we

possibly can. Beyond this minimum, we are free to choose our time, by spreading the less immediately urgent part of the post-war building programme over a longer period. We may, however, find that the minimum at which we must aim in the first few years after the war is no lower than the maximum at which, in view of rival claims upon man-power and materials, it is practicable to aim; and, if this is so, the case will be strengthened for carrying the whole programme through at a rapid pace. If the industry is once scaled up to a certain level of output, it will be comparatively easy to keep going at that level; and it is likely to be a matter of special importance to maintain building activity at a high point at the time when the exhaustion of the forces making for boom immediately after the war confronts the Government of the day with the first real test of its determination to maintain 'full employment'. The building industry occupies a key position in the Trade Cycle, and is of pre-eminent importance in relation to the maintenance of capital investment. The very worst moment for deciding to scale down building activity will be one at which the general level of business activity shows signs of falling off.

I shall come back to all these questions in later chapters of this book. But, in order to clear the way for a study of them, I must first tackle the fundamental issue of planning. Are we to plan? If so, what are we to plan, and what are the essential instruments for making our plans and for carrying them into effect? And, first and foremost, what is planning, and how much substance is there in the allegation that it is inconsistent with liberty and involves disastrous interference with the working of beneficent economic 'laws'? Would planning mean less production of useful goods and services, or more? Would it mean less real and tangible freedom for ordinary people, or would it mean an enlargement of the kinds of freedom that most people want and value?

CHAPTER II

TWO KINDS OF PLANNING

THE word 'Planning', as I pointed out in the opening chapter of this book, is currently used in two quite different senses. These two senses overlap, so that there is often a great deal of confusion about what is meant. When an architect, or a municipal official, or a housing expert, talks about 'Planning', what he usually means is the sort of planning that is authorized by the Town and Country Planning Acts, which give certain local authorities power to regulate the uses to which land may be put within the areas under their supervision. These Acts give local authorities, subject to a great many conditions, the right to draw up plans of land-use for their areas, to 'zone' some land for industrial and some for residential development, to regulate the types of building that may be put up and the uses to which buildings may be put, and to check socially undesirable forms of development, so as to prevent 'nuisances' and increase both the amenities of living within their areas and the right adjustment of urban and suburban growth to the purposes, economic as well as social, which they are setting out to promote. 'Planning', in this sense, was applied originally only to areas in the neighbourhood of towns that were not yet built up: it has since been extended, with modifications, to built-up areas and to rural as well as urban land.

When an economist speaks of 'Planning', he has usually something quite different from this in mind. What the economist who advocates 'Planning' sets out to plan is the use to be made by the community of its productive resources, so as to yield the highest possible social and economic advantage to the inhabitants of any area over which the plan is to apply. There exists, in any area, a certain supply of economic resources—soil fertility, minerals under the soil, existing capital equipment, population possessed of divers traditional skills and aptitudes, means of transport by road, rail or water, public utility services, houses and other buildings, climatic conditions favouring some

kinds of production and unfavourable to others—and so on, through the entire gamut of natural and acquired advantages and disadvantages which each area possesses from the standpoint of its suitability for the location in it of this or that type of productive or commercial operation. Some of these advantages and disadvantages are fixed, or alterable only over long periods as a result of new scientific methods whereby men can more fully control the conditions of their environment. Others are alterable at will, or may be altered at any time by forces more or less amenable to control. Economic Planning, as distinct from Town and Country Planning, means taking any area to which planning is to be applied as it is, and considering how to make the best of its natural and acquired resources, and how to develop them, from the standpoint either of achieving the highest possible total of production, or of value generated by production, in the area concerned, or of working its productive capacity in with that of other areas so as to achieve the largest possible value of production over the combined areas as a whole. Economic Planning may thus be undertaken with reference to the economic welfare of a single locality, or of a whole country, or of any combination of countries up to the whole world.

Town and Country Planning, as they have been practised hitherto, have been essentially local, or at most regional, in scope. They have been functions of local authorities, planning for their own towns or districts, or at most of Joint Planning Authorities or Advisory Committees representing a number of neighbouring areas. Each local, or at most regional, unit has planned for itself, trying to increase the amenity or economic prosperity of its own area, without any responsibility for the effects of its planning upon other areas. Town and Country Planning Authorities have had no power to order people to come and live, or industries to settle, in their areas: they have at most only been able to offer inducements, by trying to make their areas attractive to residents or by offering industrialists special advantages in such matters as the supply of water or power, good sites for factories, or low rates, or by advertising the merits of their areas from the standpoint of transport facilities, suitable labour supply, or the presence of a flourishing consumers' market near at hand. It has been outside their authority,

except in the limited realm of municipalized services, actually to offer openings for employment, or to settle how big or how small the population of their areas is to be and what types of industry are actually to be carried on within their frontiers. Nor has there been, in Great Britain, any master plan for the country as a whole laying down the general lines of social and economic development, so as to cause the local planners to work within the limits set by this major plan. In Great Britain, the State has planted no new towns, such as Magnitogorsk; nor has there been any national authority to decree that populations shall settle here or there, or industries be planted in one place rather than another in accordance with a widely conceived scheme of national economic and social development. The Town and Country Planning Authorities have had, for the most part, to adapt their plans to economic developments and movements of population governed by forces outside their control, and also outside the control of the national State from which they derive their powers. They have been in a position, to a quite minor extent, to influence the working of these forces; but their influence has extended only to encouraging or discouraging tendencies which have not been themselves the outcome of any process of planning.

Economic Planning, on the other hand, begins most naturally on a national scale, though it has of course both local and international implications. It usually begins nationally, because under present political conditions the power to plan the use of economic resources resides principally in the national State, and not in the local governments which are subject to it or in any international body in which it recognizes a superior right. Any national economic plan will of necessity have international repercussions, because it will affect the extent and channels of trade between the planned country and the rest of the world; and it will also have local repercussions, because a decision to plan industrial development involves a decision, in some degree, to plan its location, and therewith to influence the distribution of population between different areas. The natural way, however, for the economic planner to begin is by thinking in terms of the use of the productive resources of the country as a whole, in such a way that the local planning emerges rather as a conse-

quence of the national plan than as something on which the national plan is based. This is too sharp a contrast, as we shall see; but I can show its substantial correctness by taking a concrete example.

One of the big questions we in Great Britain are arguing about just now is that of the scale on which we propose to maintain home agricultural production after the war. This is a highly complicated question; for it is a matter not only of how much is to be produced in total, but also of how any total is to be made up. The economic planners will need to discuss, and are already discussing, how much wheat and other cereals we ought to plan to grow, how much milk, how big herds and flocks for the production of meat, how many pigs, how many head of poultry, how many acres of potatoes, green vegetables, soft fruit, hops, and so on, we ought to include in our post-war programme of agricultural production. Of course, these things cannot be settled without considering how much suitable land we possess for these various types of agriculture, or without taking into account what, on lands of varying suitability, the economic returns are likely to be. The economic planners are bound, in considering such questions, to take into account the effect of any plans they draw up on the position of agriculture in different areas of Great Britain; for clearly two plans aiming at the same total production in terms of value may have widely different effects on agriculture in, say, Norfolk or Lincolnshire and the pastoral areas of the West. They will, however, while taking account of such factors, tend to make their agricultural plan primarily in terms of total home food production in relation to required imports and of the amount which consumers can be called upon to pay in order that we may depend less on food imports than we should do if home production were left to be determined by world economic forces entirely without any national economic planning. The local aspects will be considered; but they will tend to be secondary to the main considerations influencing the general scope and extent of the plan.

Even more, in any planning of industrial production, except in the extractive industries, the economic planner will tend to consider first what is the right amount to produce, and only in

the second place where it is to be produced. Doubtless, in many cases, the latter will be mainly a question of continuing production in the places where it is already established; but, even so, whenever any question of expanding or contracting output arises, there will be need to decide where more or less is to be produced. Such decisions will tend to follow upon, and not to precede, decisions about the total amount of production of each class of goods over the whole country of which the economic programme is being planned. Moreover, in many cases the main factors determining the decisions about total output of this or that class of goods will be related to considerations of foreign trade and exchange and of comparative cost of home-produced and imported goods rather than to location in this or that part of the country.

Where Economic Planning is being practised on a national scale, the character of Town and Country Planning is bound to be greatly affected. The economic planners, in order to secure the realization of the planned output of each class of goods, will have to apportion the tasks of production to different areas, to authorize and arrange for the setting up or extension of factories and other plant in particular places, and to ensure a right relation between the available labour supply in each area and the openings for employment. The national economic plan will thus have to be converted into a series of particular production plans for the various districts, and will have to make provision for the undertaking in each district of the amount of new investment needed for the implementation of the plan. It will have to provide for the immigration of workers into areas where the plan requires additional labour, and for emigration from other areas in order to supply the migrants. It will have to reach an adjustment in respect of the alternative possibilities of taking the factories to where the population is, and moving the population to fit in with the changing requirements of *optimum* factory location. The national economic plan will thus be in outline a series of local plans as well; and any local planning authority will have to adapt its own measures to the requirements of the national plan. The town planner will retain his task of planning his town, or his stretch of country, in such a way as to get the most out of it in terms of amenity of living

and efficiency of service. But he will be working to a pattern which will be not wholly of his own devising, or forced on him by the unplanned action of private persons pursuing private interests, but the local application of a wider national plan based predominantly on economic considerations—for the pattern of living is bound in any country to be set mainly by the pattern of livelihood.

The town and country planners, under a nationally planned economic system, will know within broad limits for how large a population they are meant to plan, at any rate for some time ahead; what types of industrial, agricultural, or tourist development are planned for the areas with which they are dealing; what the pattern of transport and of regional services is intended to be; and, in effect, how their locality or region is meant to fit in with other localities and regions in the pattern of the national economic plan as a whole. The national plan, so far, will be economic rather than social in its determinants: it will be a plan for putting the whole of the national economic resources to what are regarded nationally as the most eligible uses. It will be for the local and regional town and country planners to look after the amenities side: to see to it that whatever population is sent into the area, and whatever forms of production are developed in it, the area shall be as comely and as pleasant to live in as it can be made, subject to the requirement that it must play its part in the approved national plan of production.

Of course, *national* planning may itself advance beyond the purely economic into the realm of amenities, and may be guided by social as well as by purely economic considerations. For example, the State may take upon itself the task of reserving certain tracts of land as National Parks, or Camping Grounds, or of reserving them from any use except for agriculture in order to preserve their amenity. The State may decide to develop certain areas as tourist centres, and to refuse admission to them to all industries, or to most. Or, again, the State may take upon itself, instead of leaving to local or regional bodies, or to private initiative, the foundation of new towns—based perhaps on some of the big industrial centres which have been brought into existence for war production. But wherever the State decides to do any of these things it will need, in practice, to work

out its projects in close collaboration with the local or regional bodies existing in the areas affected by them.

The essential point is that, in the absence of national planning, whether exclusively economic or partly social as well, the town and country planners necessarily work to a large extent in the dark, trying to make their plans fit in with anticipated movements of population and industry at which they can hardly more than guess; whereas national planning sets the regional and local town and country planners a series of definite tasks and therewith gives them better assured foundations on which they can set out to build.

This statement is, no doubt, too absolute; for the existence of national economic planning need not mean that everything is planned. The State, if it sets out to plan at all, can plan more or less. It can try to plan the greater part of the national economic life, or it can confine its activities to planning a few 'key' parts of it, in the expectation that the unplanned parts will largely adjust themselves in practice to the planned parts. It does not follow that the State, because it attempts to plan agricultural production, or the output of coal, steel, ships, and a few other vital industrial commodities, must necessarily plan the output of children's sweets, or women's hats, or men's underwear. It must, no doubt, if it is attempting to bring about a broadly right distribution of the available productive resources between alternative uses, have in view at least an approximate notion of the amounts of labour and other resources that can be spared for each main type of industry; but it may limit its actual intervention to measures designed to correct serious disproportions as and when they arise, and may not attempt to plan everything, or indeed anything that does reasonably well without being planned.

How much the State plans, in an economic sense, will obviously depend very greatly on the character of the social and economic system under which the planning is being done. In the Soviet Union, all industries are State-owned, except certain very small-scale industries which are left in the hands of *artels* (Producers' Co-operative Societies) of independent working artisans. As the State owns all the major industries, provides the capital for their development, and takes the risks attaching to

their conduct, obviously the Soviet Government, through its planning agencies, plans over the entire field of factory and other large-scale industrial production; and it also largely plans agricultural output, using as its instruments the collective farms through which most Soviet farming is now organized. On the other hand, a State in which most industries are in private ownership, and the risks of development and production for the market are taken by the capitalist owners, clearly cannot plan over so wide a field, and has to face very complicated problems whenever it sets out to plan in an industry which is within the domain of private, profit-seeking enterprise.

Where industry is run for profit, under the ownership of private persons whose capital is ventured in any enterprise which they undertake, it is hardly practicable to order a business man, or a board of directors, to set up a factory wherever the State planners wish it to be put. Investment, under the profit system, is a voluntary act; and, even if the State can forbid the firm to establish its factory elsewhere, commanding its establishment in the chosen area is another matter, for it is at the firm's discretion not to establish any factory at all. The State could thereupon, no doubt, provide the capital itself and build and operate the factory under its own ownership and control. But we are now postulating a system in the main of private enterprise; and under such a system the Government would hardly wish to find itself the owner of a miscellaneous collection of factories in many different branches of production, selected solely on the basis that private enterprise had been unwilling to set them up. In practice the State could go no further than to ban certain areas to the firms wishing to set up new enterprises, while leaving them a wide choice of alternative areas, and/or to offer such firms inducements to settle in the areas which would fit in best with the requirements of the national economic plan. Such inducements might include the provision of sites on easy terms, or even of actual buildings where surplus war factories afforded suitable accommodation; assistance with capital at low rates of interest, or of long-term credits, or of guarantees of interest for a period of years, such as were given under the Trade Facilities Act after the last war; assurance of a market, where the factory was designed to produce goods needed by public bodies—for ex-

ample, requisites or fittings needed for the post-war building programme; or any of a number of other inducements to settle in the areas where the State wished the proposed enterprises to be carried on.

This mixture of bans on some areas and inducements to settle in others might go a long way towards persuading private firms to work in with the State plans for the development of the location of industries in the various areas. How effective it would be would depend very greatly on the general economic environment at the time when it was being applied. If the conditions were those of full employment, backed by a considered public policy of maintaining the demand for labour consistently at a high level, business men would be much more eager to invest than they were during the period between the wars, when there was a large amount of unemployment, and of its correlative, under-consumption, even in good years. A deficiency in the will to invest is the natural concomitant of a depressed consuming market: given a high level of demand, and an assurance that the level will be kept high, business men will not readily forgo opportunities for investment. If they are not allowed to build a factory in one place, they will build it elsewhere, rather than not build it at all, unless there is something very much amiss with all the alternative locations that are left open to them. A policy of controlled location, under a system of private enterprise, can be much more easily pursued in conjunction with a public policy of 'full employment' than when no such policy is being followed.

If control of location on the lines here suggested is in force, town and country planners will not be able to plan with any exact foreknowledge of the populations and industries that will be located in the various areas; for there will remain to the promoters of businesses a fairly wide range of choice. But they will know what the State's policy is in relation to their areas, and will be in a position to work in with that policy, instead of being left almost entirely in the dark.

Of course, the more industries the State directly owns and controls, the greater and the more direct will be its power over the location, as well as over the general development, of industry. Indeed, control over a few industries, which occupy a key

position in the economic system as a whole, would endow the State with a large power of influencing the development and location of many of the lesser industries, as these depend greatly on the key industries and would have to a considerable extent to conform to any pattern designed for the key industries in the State economic plan. Especially, State control of building would carry with it a substantial influence over location; for it would give the State power to guide the movement of population, to stimulate or retard the growth of towns, to create new towns, and to affect the movement of industry as well as population. This would not necessarily involve State building. It would not matter whether the building were done directly by public bodies or through private contractors, provided that the State, or local authorities acting under State guidance, placed the contracts and owned the finished product.

It goes without saying that planning can be greatly facilitated by public ownership of the land. As long as land is privately owned, each owner has an interest in getting his land developed in preference to other people's land, irrespective of the social merits of the case. The building value of land is as a rule so much in excess of the agricultural value that the developer is quite indifferent to the agricultural quality of the land on which he builds. The difference between the price of good and bad agricultural land forms too small a fraction of the cost of development to influence his decision; and as a consequence good land is continually being alienated from agricultural use, even when bad land would do just as well to build on. There is almost always much more land in the neighbourhood of a growing urban area than can possibly be actually developed; and it is largely an accident which lines development actually takes—or, if not an accident, a matter over which the owners of the land have often no control. If the local authority, or an estate company or syndicate, decides to erect a housing estate on a particular spot, the effect is often to confer a 'development' value on a great deal of neighbouring land—much more than can be actually built upon—without any action on the part of the owners, who, if they choose to sell, can reap an unearned increment. Moreover, when additional land near the new estate comes to be needed for further building, it has to be acquired

at a price which takes account of its 'development value.' There are complicated provisions whereby, in certain cases, a local authority can recover part of this enhanced value in the form of a charge for 'betterment'; but the arrangements for this are highly unsatisfactory, and have yielded so far very disappointing results.

As long as land is privately owned, it is to the interest of each owner (unless he is rich enough to prefer enjoying the amenity of his land to getting as much money out of it as he can) to do anything that is within his power to influence the course of development so as to direct it towards his own property; and it is also to the interest of land speculators to get advance information about building projects and to buy up land which is likely to acquire a development value while it can still be acquired at or near its agricultural price. If there were but a single landowner, to whom all the developable land belonged, it would be indifferent to him which piece of his land was actually built on, or went up in value because land near by was being developed. Or rather, the one landowner would have an interest in preventing the destruction of good agricultural land, where there was other land that would do just as well to build on; and, let us hope, he would have also enough aesthetic appreciation to wish to avoid the destruction of places of natural beauty, or of land needed for open spaces in order to preserve a 'green belt'. He could, as sole landowner, afford to indulge his tastes in this respect at no cost to himself, or even to his advantage by increasing the total amenity of the area. He would be able to ensure that development should follow a thought-out plan, and would be under no inducement to encourage socially disadvantageous forms of development.

This is the town planner's case for land nationalization; for clearly, if the land is to be all owned by one owner, the State is the only possible candidate for this office. It would, no doubt, be possible for the land to be owned locally or regionally by public authorities holding it under the sanction of the State; but, if this were the method adopted, the State would still have to reserve to itself the power to determine the regions and to keep regional land-use in conformity with national requirements.

Effective planning of land-use is very difficult without public

ownership ; and very great difficulties are bound to arise after the war if the land remains in private hands, both in the planned re-building of blitzed urban areas and in the creation of new urban or suburban centres in connection with projects for the re-distribution of industry and population in such a way as to avoid urban congestion, more ribbon development, and the sprawl of cities over more and more of the surrounding country. If cities are to be re-built on the right lines, with more open space, better facilities for traffic, and better zoning, so as to avoid the chaotic mixing-up of residential and industrial and commercial districts ; and if plans for the creation of new or satellite towns and settlements are to be rightly executed, it will be indispensable to find means of avoiding a scramble by a host of landowners, each eager to enhance or to preserve the value of his own patch of land.

These are the problems which the Uthwatt Committee on Compensation and Betterment was set up to solve. Consisting of lawyers with wide experience of the issues arising in connection with transactions in land, it was appointed to find ways of ensuring the pre-eminence of the public interest in post-war town and country planning. It had to face two outstanding questions—the methods to be adopted in dealing with land already built upon, or otherwise ‘developed’, and the methods to be adopted in connection with land as yet undeveloped, but needed for development in connection with post-war planning schemes.

I doubt if any open-minded person can read the Uthwatt Reports without coming to the conclusion that much the simplest way of handling both these problems would be to make all land, whether developed or not, public property—of course, without disturbing the occupancy of any occupying owner who might wish to remain where he was unless and until his land was needed in the national interest for some other use. The Uthwatt Committee, however, clearly regarded this simple and obvious solution as ruled out on political grounds. Indeed, it explicitly said so, and put forward its alternative recommendations on the assumption that general nationalization of the land was to be regarded as politically impracticable, whatever its merits might be. Taking this view, the Committee fell back on two different

solutions, one for 'developed' and the other for 'undeveloped' land. In the case of land within existing built-up areas, it recommended that local authorities should be given much wider and more simply exercisable powers than they have at present to acquire land in connection with planning schemes, including not only land actually needed for building under public auspices, but entire areas, so as to give the authorities power to lay down comprehensive plans of re-development and to prevent rebuilding along lines which, in order to preserve the value of individual patches of land, would run counter to a sensible re-planning of damaged areas and obsolete properties and render impossible the needed improvements in the convenience and amenity of our cities.

In the case of land at present undeveloped, the Uthwatt Committee proposed that the State, without acquiring the land itself, should purchase from the existing owners the entire 'development rights', and should thereafter acquire the land itself wherever it was decided actually to develop it for non-agricultural use. Under this scheme, the existing owners would be bought out in respect of their right to develop their land, but would remain in undisturbed possession as long as the land was not needed for public purposes or scheduled for actual 'development'. The owners would thus cease to have any claim to share in any increment arising in future in the value of their land, either from it being built on or from building in the neighbourhood or any other development, such as road-making, enhancing its commercial value. They would have received a cash equivalent for any development value which the land actually possessed in 1939, and would thus have been finally settled with in this respect.

The question which necessarily arose in connection with any such scheme was this: On what basis was the correct compensation for the transfer of 'development rights' to be assessed? If each piece of land had been valued separately, the total arrived at would without any doubt have far exceeded the total value acquired by the public. We have seen that a potential 'development value' attaches to far more land than can be actually required for development, and that it is largely either an accident or a result of decisions by public bodies or estate companies

which land, out of the practicable alternative sites, actually gets developed. Each landowner, therefore, would inevitably claim compensation on the assumption that his land, rather than somebody else's, would in fact be picked out for development; and it would be exceedingly difficult to combat his claim wherever his land was in truth *potentially* developable, in the sense that it *might* be picked out from among the alternative sites available.

The Uthwatt Committee, realizing this and recognizing that the public could not be called upon to pay, in the aggregate, much more than the 'development rights' in the land were really worth, proposed that compensation should be based on assessing first the total value of all 'development rights' over the country as a whole, and then sharing out the total sum representing this value among all the claimants in proportion to the *relative*, rather than the absolute, value of their respective claims. Thus, if the result of valuing each patch of land separately in respect of its development value were to be a total sum five times as large as the estimated 'development value' of all the land affected, each owner would receive one-fifth of the value set upon his land by the method of separate assessment. Special provisions were laid down to cover the cases of owners who had actually spent money on increasing the 'development value' of their land, or had acquired land recently at a price based on its 'development value'. But in general the principle put forward was that the State should pay for the 'development rights' as a whole approximately what these rights as a whole were worth, and not some fancy sum based on the unreal assumption that all the land theoretically capable of development could be actually developed.

The Uthwatt Committee's proposals, reasonable as they seem, roused hot opposition among landlords; for each landlord hoped either that his land would actually be developed, or that the belief that it might be developed would so enhance its selling value as to enable him, if he wanted to sell, to realize a substantially higher price than he was likely to get under the system of global valuation of all 'development rights'. So influential was this opposition that until more than two years had gone by after the Uthwatt Committee put forward its proposal, the Government had failed to announce any conclusions upon it.

The Government had promised earlier, on the basis of an Interim Report from the Uthwatt Committee, to confer on local authorities the power to acquire whole areas for the purpose of comprehensive urban re-planning, and to fix a price 'ceiling' for such acquisition at the value of the land in question as it stood in March 1939. But even these promises, though they were given in 1942, were not embodied in legislation; and there were many hints, before the Government did at length produce its proposals, that there too landowning interests were offering strong opposition, especially to the promised 'ceiling' for the prices to be paid by the public bodies which were to acquire the land.

The proposal that the State should acquire the 'development rights' in land, rather than the land itself, but that any land actually needed for development should be purchased outright as and when it is wanted, bears all the traces of a compromise. It embodies a full recognition of the truth that development cannot proceed satisfactorily from the standpoint of the public except on land that is publicly owned, and that the public is bound to be fleeced whenever it sets out to acquire land for development if the 'development rights' continue to belong to the private landowner up to the time of purchase. The Uthwatt Committee uses the term 'floating value' to describe the additional value ascribed to land on account of its *potential* value for development, and shows clearly that it is impracticable to arrive at fair terms of purchase under the existing conditions. The effect of the 'development rights' scheme would be that the public would be able to acquire undeveloped land for development at a fair price, but would not become the owner of land retained in agricultural use. The case for nationalization of agricultural land, as a means towards easier provision of capital for rural improvements and towards a rational agricultural policy, fell, of course, outside the terms of reference of the Uthwatt Committee, which was set up to consider only the problems of compensation and betterment as they arise in areas already developed, or ripe for non-agricultural use.¹

The Uthwatt proposals, if they were accepted in full, would provide a basis on which urban re-planning and development

See note on page 65.

could proceed on reasonably satisfactory terms. But it is not easy to see how anything short of them can provide such a basis. If the State were to acquire only such land as seems likely to be needed for development immediately after the war, there would be no way—or at all events none has yet been proposed—of avoiding payment for such land at a price based on the ‘floating value’, and much in excess of what it is really worth. Moreover, when later on further land came to be needed, the development of the land first acquired would have helped to create further ‘floating values’, for which in turn compensation would have to be paid. The argument sometimes advanced against this view is that the land must be worth what anybody is willing to pay for it, or for a similar patch of land near by, and that the State, in compensating the owners on the basis of the ‘floating value’, would be only giving them the real value of their property. This, however, ignores two points. In the first place, it is often not the case that there is any purchaser in the field ready to buy the land at the price claimed from the State. The value attributed to it is a fictitious value, which would be paid only if there were someone who actually wanted that particular land for building purposes, if even then; and this fictitious value is attached to far more land than can possibly be wanted for building. Secondly, the value is in the main created by the State’s building and housing programme, by public expenditure in bringing such services as electricity, gas and water within reach, or on road-making and the provision of means of transport. In effect, the owner who is compensated at the development value of his land is often receiving compensation for a value added to it by the public, or, even where the public has not authorized the development, by the action of persons to whose enterprise he has made no contribution at all. The landlord who objects to the Uthwatt plan is in effect claiming to receive something for nothing out of the public purse.

If, in accordance with the Uthwatt proposals, the State becomes the owner of all ‘development rights’ in undeveloped land and the local authorities are given wide powers to acquire areas of already developed land needed in connection with re-planning schemes, planning can proceed upon assured foundations. If not, it cannot. So much is plain. But there is a

further question which would remain to be settled, even if the problem of fair terms for land acquisition could be got out of the way. Who ought to do the planning which will determine what land will be needed for development either of existing towns or of new towns, if any new ones are to be set up either as satellites or as independent centres of industry and population? It is manifest that the existing Town and Country Planning Authorities are exceedingly unsuitable bodies to be given charge of all planning that is to be carried out locally or regionally. The present position is that town and country planning powers are in the hands not only of each separate County Borough and Borough, but also of each Urban or Rural District. Outside the County Boroughs, the County Councils have certain limited co-ordinating powers, and the smaller authorities can, if they wish, hand over their powers to them, so as to make unified planning possible over larger areas. But this handing over is entirely optional; and the great majority of the smaller authorities are not in the least disposed to surrender their local powers.

It is, of course, also possible for groups of neighbouring local authorities to join together in forming a Joint Town Planning Committee and, if they so desire, to give this joint body executive instead of merely advisory powers. There are in existence many joint bodies, some of them covering very large and others quite small areas. But most of them have no executive authority, and depend for their influence on the acceptance of their advice by the local authorities which are represented on them; and there have been instances in which a particular local authority, by refusing to join in a combined body with its neighbours or by rejecting the advice of such a body, has made hay of planning over a whole region.

Evidently, when we come to re-building our blitzed cities after the war, nearly all of them will need to re-house a substantial part of their populations outside their present municipal boundaries. This need will exist, whether the re-housing is to be done by a mere overspill of the city into the neighbouring countryside, as has usually happened hitherto, or by a deliberate planting of satellite towns at some distance from the parent cities, so as to leave a green belt of rural land in between, or by the creation at further distances of quite new and independent

towns. Whatever the policy adopted may be, the City or Town Council is obviously not a satisfactory body to be made solely responsible. If it is made so, the line of least resistance will be to go on building close round the edges of the existing built-up area, and in due course to demand an extension of the city boundaries to take in the new suburban districts. The process of urban agglomeration, which we should be setting out to prevent, will receive a fresh stimulus, and more land than ever round our great towns will be spoilt as we adopt higher standards of accommodation and amenity and so reduce the permitted building density for each acre of land. Moreover, where, as is often the case, several towns are already built up into a continuous urban area, with no open land in between, it is obviously absurd to plan their re-building separately, instead of making a single plan to cover the whole of what is in effect a single city, even if it at present lacks a unifying civic soul.

At this point, the problem of sound town and country planning gets tangled up with the exceedingly difficult problem of local government re-organization. Most people agree in condemning the present system of local government areas as utterly at variance with modern needs. Technical change has made many of the existing areas hopelessly inappropriate as units for effective service, not only in the public utilities, but also in relation to health services and many other branches of local administration. In addition, what were originally separate urban areas have in many cases grown together to form virtually single communities, but are still governed by separate Councils, each with its own full range of local services entirely apart from those of its neighbours.

Almost everyone agrees that Local Government ought to be extensively re-organized; but it is difficult to find two people, or at all events two groups of people, who agree about the lines which re-organization ought to take. Almost all the local government bodies are hostile to any post-war continuance of war-time Regions, exercising over wide areas powers delegated from Whitehall. On the positive side, those who have been associated with County Boroughs sing the praises of unitary administration, and would in many cases like to see the whole country cut up into areas, modelled on the County Boroughs,

within which all local government powers would be concentrated in the hands of a single elected Council. Those who have been associated with County administration tend to advocate increased powers and functions for County Councils, with increased County supervision over the smaller units; and some of them would like to see the County Boroughs brought under the jurisdiction of the County Councils. Those whose experience has been in the smaller units—non-County Boroughs, Urban Districts, and Rural Districts—are usually armed to resist any encroachment on their authority by the bodies which hold sway over larger areas. The result of this conflict of views is that national politicians are apt to regard local government reform as a dangerous and unprofitable subject, out of which they are likely to get more kicks than ha'pence, and Governments are apt to think that they had much better let it alone.

The present Government has already let it be known that it is of this mind, and that no major changes in local government structure are likely to figure in its programme of reconstruction. In support of this decision it is plausibly argued that it would be most unwise to add to the unavoidable dislocations of the post-war period any attempt to make over the system of local government, through which so many vital services have to be administered. The weakness of this contention is that, if local government is allowed to settle down again after the war in the old grooves, thorough-going reform will be made more difficult than ever; and further that, as local government is bound to need considerable readjustment in order to enable it to do at all the jobs which it will have to do in the fields of public health, education, and town and country planning, the effect of not reforming it, but instead rigging up more improvised machinery on the existing faulty foundations, will be to make the confusion a great deal worse than it already is. The local government agencies, though they do not agree about what ought to be done, do agree about the danger of handling separately each issue as it comes up—health services, education, town and country planning, water supply, and so on—and trying to adapt the present structure to each in turn by means of Joint Boards and Committees of every sort and kind.

It seems, however, highly improbable that the problem of

local government areas will be tackled in the near future in any comprehensive way. This means, in relation to town and country planning, that we shall have somehow to make do with the existing types of local authority, and that any planning over wider areas will have still to be done by means of joint bodies. On what lines, in future, are such joint bodies to work, and what powers and duties are to be assigned to them? At present, the newly established Ministry of Town and Country Planning has Regional Officers, whose job it is to discuss planning problems with the numerous separate planning bodies and to endeavour to promote greater common action among them. It remains to be seen whether this particular piece of regional machinery will be allowed to outlast the war. Whether or no, there is a plain need for Planning Authorities authorized to make general plans laying down a pattern of town and country development over large areas—the West Midlands, for example, or the North-East, or the South-West—and it is also clear that these authorities should be constituted neither by devolution from Whitehall nor by any process of direct election, but mainly of representatives drawn from the local authorities of all sorts and sizes within the areas over which they are to plan.

I come back at this point to the distinction which I drew on page 27 between local town or country planning and regional planning—using the word ‘region’ in a sense quite different from that in which it is used to describe the Civil Defence Regions set up at the outbreak of war. The ‘Regions’ I have here in mind would be in most cases a good deal smaller than the Civil Defence Regions, so that there would be, in England and Wales, at least twice, and perhaps three times, as many of them. They would be instruments not of devolution from the centre, but of co-ordination of local agencies; and their function would be to draw up regional plans of town and country development, in such a way as to designate broadly the economic and social pattern of each lesser area, but to leave to the smaller authorities the task of translating the general regional plan into terms of their own local problems. Regional planning and town, or country, planning would thus be recognized as distinct and separate functions; and the detailed execution of the regional plan would be in the hands of the local bodies, because it would

have to be amplified and adapted in the light of local conditions in each separate part of the Region. The regional plan, let us say, would designate Coventry or Kidderminster as a centre for certain types of industry up to such and such a total employment capacity and population; but it would be left to the Coventry or Kidderminster Local Authority, through its Town Planning Committee, to make the detailed plan governing land use and development within its area, in such consultation with its immediate neighbours as the local circumstances might appear to require.

What would be essential, in any such system of regional and local planning, would be that the regional plan should be regarded as the master plan, to which the local plans would have to conform. No effective planning will be possible if each local body is left free to draw up its own plan without reference to the needs of the wider region of which it forms a part, and if regional planning consists merely of attempts at reconciling conflicts between the resulting local plans.

Regional planning cannot, however, in practice assume this 'master' character unless the regional plans are themselves the application to regional conditions of a national plan based on some estimation of the total amount of development that is practicable and needed over the country as a whole, and of some apportionment to the Regions of their respective shares in this total. The localities will not accept the verdict of the Regions unless it comes to them with the authority of the State behind it, to the extent of carrying with it a national prescription of the amount of development that is regarded as practicable within the Region, so that there is an estimated total which has somehow to be assigned to the separate localities. As long as each locality is free to plan in the dark, without reference to any approved national plan, local plans will tend to be based on quite unrealistic expectations, in the sense that the sum of their several expectations will greatly exceed the total possibilities of development. There must be an estimated total, to be broken down first into regional and then into local allocations; or planning will be out of all relation to what can really happen, and each local planning authority will continue to estimate its possibilities much as landlords now estimate the

development value of their land—without regard to the limits of possible development in a global sense. There is an element of 'floating value' in town and country planning as well as in the price set on land.

Thus, we come back from this excursus on local and regional planning to the necessity for a national plan. The national plan, however, will differ from both the regional and the local plans in that it will be based mainly on considerations of economic policy rather than of patterns of urban and rural living. The national plan will be primarily a plan for 'full employment', laying down in relation to the needs of the home market and the prospects of overseas trade certain requirements for the production of various commodities and services, up to an aggregate which will make the most of the available productive resources. It will embody an orderly distribution of the tasks of production in accordance with the plan among the various Regions, involving provision for such regional investments in capital goods and in durable consumers' goods and services as are necessary for the realization of the plan. Where exactly industries and populations are to settle within each Region will be primarily a matter for the regional planning authorities: how the pattern of living in town and country is to be adjusted to these regional allocations will be mainly a matter for the local bodies which will be in charge of the detailed control of land-use in their respective areas.

In effect, an *economic* plan designed to secure a full use of the available productive resources both calls for and makes possible a new conception of town, country, and regional planning. Every investment is an investment *somewhere*, affecting the right planning of the area in which the investment is made. A planned investment policy, which is one aspect of a national economic plan, implies a planned distribution of the openings for employment, and conditions the demographic situation to which the town and country planners have to adjust their plans.

What bearing has all this on the character of the Government machinery needed for the devising and implementation of a national economic plan in its relations to regional and local planning? Where there is a central economic plan, the nature of the plan itself involves decisions about the location of essential

industries and the development of transport and other utility services which are required for their successful conduct. These decisions in turn imply further decisions about the amount of house-building needed in the various areas to accommodate the populations whose breadwinners will find employment in the local industries. Industrial location and housing are not two independent matters of public policy: they are closely inter-dependent. The fact that a large population already exists in an area, with houses to live in and a local equipment of essential services, may be a good reason for developing industries in that area to absorb any surplus of labour over the existing openings for employment—especially where the established local industries are declining, or are threatened with a decline in the demand for their products. On the other hand, where it is decided to develop new industries or to expand existing industries beyond the capacity of the local supply of houses or urban amenities, there must be provision for an expansion of housing and other service building parallel to the expected growth of employment.

The central planning agencies will therefore have to plan simultaneously for industrial and for housing development; and the central department which has charge of the co-ordination of regional and local, town and country, planning will have to work in the closest touch with the department which is responsible for the planning of economic development as a whole. Town and country plans should be properly balanced plans covering both industrial and residential development; and in the making of such plans the responsible bodies must have due guidance from the central departments responsible for both. The existing arrangement, under which the Ministry of Town and Country Planning stands apart both from the Board of Trade, responsible for industrial location as far as any Government department is responsible at all, and from the Ministry of Health, which is in charge of housing policy, is merely absurd. I am not suggesting that the three functions can all be combined in the hands of a single department. I realize that they cannot, any more than agriculture can be taken away from the Ministry of Agriculture and transferred to the Ministry of Town and Country Planning simply because town and country planning has important agricultural aspects. But evidently, if there is

to be planning in the wider economic sense in which I have spoken of it in this chapter, there must be some Government authority to exercise a co-ordinating control over its various aspects. This cannot be an administrative department, in the ordinary sense. It will have to be a linking and unifying department, analogous to the Ministry of Defence in the sphere of the war services; and the separate departments will have to remain in being to supervise the carrying out of those parts of the combined plan which fall within their several spheres. Under such an arrangement, the Board of Trade, or a Ministry of Industry, should such a ministry be created, would have to be responsible for industrial location and some other ministry for housing; and both would have to deal with the local bodies through which large parts of their plans would be translated into concrete terms. But these two ministries, and any others concerned, would have to act, not as independent policy-makers in matters covered by the general economic plan, but as agents for applying the plan in their respective spheres of action. There would have to be, either a co-ordinating Ministry of Planning, under a super-minister with higher status than the ministers at the head of ordinary departments, or some special co-ordinating agency, analogous to the Committee of Imperial Defence or to a War Cabinet Committee, presided over either by the Prime Minister himself or by a minister specially authorized to act as his deputy.¹

This is not the place to go into the relative merits of these alternative solutions. Whichever is adopted, there will be need,

¹ This chapter was written before the publication of the Government's White Paper on *Employment Policy* (Cmd. 6527), in which it is announced that the Board of Trade is to be "the department responsible for all general questions of industrial location," and is to serve as the "single channel through which Government policy on the distribution of industry can be expressed." This announcement does not solve the problem, which is not only that of unified handling of the location of industry, but also that of bringing all aspects of town and country planning, housing, industrial location, and the development of transport and other public utility services under co-ordinated control. On this wider issue the White Paper has no more to say than that co-ordination is essentially a matter for the Government as a whole, and that "there will be a Regional organization, which will bring together the representatives of the Departments concerned in the local application of these measures" [i.e. measures for the distribution of industry]. This, incidentally, seems to foreshadow a continuance in some form of the regional machinery of decentralization set up by the Government during this war.

at the centre, for a strongly manned expert body of planners, so constituted as to include specialists in both the economic and the social aspects, and to be able to take balanced account of economic and social factors in drawing up their plans for consideration and adoption by the responsible ministers. This expert body will need, moreover, to be in close touch with local opinion, so that national plans, even though they must serve as master plans to which regional and local planning will have to conform, will be drawn up after careful consideration of local needs and desires. Successful planning is not a one-way affair, proceeding exclusively from the centre out to the districts: it involves a two-way traffic, with suggestions continually passing from the localities to the centre, and with central plans undergoing continual modification in the light of local views.

I have suggested earlier that, in such a set-up as is here envisaged, the responsibility for housing and for town and country planning ought to rest with a single department. There are strong objections to multiplying departments beyond the number plainly needed to avoid overburdening any one with a number of disconnected tasks. Local and regional planning bodies, in submitting their plans for central sanction, will be compelled to cover housing, which is the main part of the actual execution of their plans for which they will be directly responsible as the sponsors of municipal estate development. They will get on much more easily, and there will be much less inter-departmental trouble over the approval of their plans, if housing can be dealt with as an integral part of their planning rather than mainly as a matter of local government finance. Dealing with it in the latter way is the unavoidable outcome of placing it under the Ministry of Health, which is primarily the department responsible for the financial relations between central and local government, and will never be brought to regard housing as more than a secondary function.

It is time to attempt to draw together the threads of this somewhat discursive chapter, which opened by laying stress on the essential differences between town and country planning and economic planning, but then went on to point out how closely the two, if they are practised together, are bound to be

related at many points, especially in the field of central administration and control.

It is, however, clearly possible for a community to have one of these kinds of planning, without the other. A Government may exercise, or confer upon subordinate authorities, wide powers to regulate the use of land without establishing any control over the volume or character of production. Control of land-use is in itself negative: it is a matter of prohibitions and restrictions on what may be done—not a matter of doing anything positive, but only one of providing a framework of order within which things must be done, if they are done at all. No doubt, town planning can assume a positive character when it is applied to the object of laying-out a city plan, of which the essential features are to be carried into effect by the city authorities themselves, by the making of streets and avenues, the erection of public buildings in the right relation to their surroundings, the provision of parks and open spaces, the establishment of traffic centres, by-passes, car parks, and so on in conformity with the general 'shape' of the city, and the pulling down of buildings which interfere with traffic or amenity or are deemed unsightly or unsuitable in location. These are all positive acts; but in most cases the area over which the city authority itself acts as a constructive agent is relatively small. Most existing buildings are privately owned, and the city has no right to order their demolition unless they can be condemned outright on sanitary grounds or compulsorily acquired in connection with schemes of civic development. Most new building, especially near the centre of the already built-up area, is privately done; for even when the city itself constructs large housing estates they are usually on the periphery. Slum-clearance schemes, where they include re-housing on the old sites, are an exception; but they have not hitherto in most cases covered large parts of the city area. They may, in the case of severely damaged cities, cover after the war a much larger part; but if town and country planners are left to stand alone, without central economic planning to guide them, they will remain under the necessity of acting in the dark, without any clear knowledge of the size of population or of the types of economic development for which they are to plan, and also without any satisfactory means

of adjusting their own plans to those of their neighbours. The view advanced in this chapter has been that the two kinds of planning ought to go together, and ought to be closely inter-related. But before regarding this view as accepted, it is necessary to consider the objections which are advanced against it by the opponents of economic planning, who profess to see in it both a serious danger to personal liberty and a flouting of the prescriptions of economic law. How far these opponents of economic planning are also hostile to town and country planning it is often not easy to find out. The more thorough-going among them are doubtless antagonistic to both; but there are many shades of hostility, and most anti-planners admit the necessity for some measure of regulation of individual choices in the public interest.

NOTE TO PAGE 53

This book was already in page proof when the Government issued its White Paper rejecting the Uthwatt Committee's proposal for the public acquisition of 'development rights', and when the Town and Country Planning Bill of 1944 was published and debated. The proposals set out in the White Paper clearly fail to afford any sound foundation for physical re-planning, or any safeguard against over-compensation in paying for 'floating value'. In the debates on the Bill, even the 'price ceiling', previously accepted by the Government, has been abandoned, and the blitzed cities have been refused the boundary readjustments necessary for effective re-location of their congested central populations. Both the Bill, with its limited scope, and the White Paper, with its plain surrender to vested interests and its no less plain intention to restrict public re-planning within the narrowest possible range, show the futility of expecting from the Coalition Government any measures capable of serving as a reasonable foundation for post-war housing and development policy.

CHAPTER III

THE CASE FOR PLANNING

THE opponents of national planning usually rest their case on the contention that, if the State does not interfere to lay down either what is to be produced or where it is to be produced, the operation of economic forces will tend to bring about both a right distribution of productive resources between alternative uses and a right distribution of industries and population about the country in accordance with the principles of the economic division of labour. They argue that firms in search of profit will tend to produce what is in most urgent demand, that competition between firms will tend to ensure that the consumers get their supplies of goods and services at the lowest practicable prices, and that firms will be induced, by the exigencies of competitive production, to put their factories where they can turn out goods at the lowest cost and workers go in search of employment to the places and occupations in which they can earn the highest wages, because their labour will be put to the most productive use. State interference to dictate either what is to be produced or where it is to be produced will, it is contended, inevitably lower output and raise costs; for, in preventing business men from producing what they please where they please, the State will be substituting its own *a priori* judgments for the expert judgments of a host of business men for whom failure is the penalty of judging amiss, and profit, and therewith the power to expand production, the reward for judging aright. In addition to this, the opponents of planning argue that planning is inconsistent with freedom and appeal to the ingrained dislike of bureaucracy which is strong in the great majority of human beings.

Of course, even the opponents of planning do not oppose all interference by the State. Most of them admit nowadays that it is right for the State to intervene in order to prevent employers from subjecting their workers to grossly unhygienic conditions of employment, or to excessively long hours of labour, or even

in some cases to wage-rates that plainly involve sweating. Most of them agree too that the State is entitled to intervene to prevent firms from putting their factories where they will constitute a manifest nuisance, and are ready to accept some element of zoning in schemes of town and country planning. They usually argue that these forms of interference by the State may be defensible, in particular cases, on social grounds; but they go on to assert that it is essential not to forget that they have a cost, and are calculated to prevent production from taking place at the purely economic *optimum*, which will be reached only if the play of economic forces is entirely 'free'.

Again, the opponents of planning admit that this free play of economic forces cannot be fully secured merely by the absence of State intervention. Business men themselves can interfere with it, by forming monopolies or combines which eliminate or restrict competition and thus make it possible for them to charge more than they could under 'free' conditions and deliberately to restrict output with the object of keeping prices high. Indeed, the more logical advocates of 'free enterprise' actually demand that the State shall intervene to outlaw such anti-social practices and to 'keep the ring' and ensure the effectiveness of the competitive struggle. They favour negative interference designed to preserve the 'freedom of the market', while they oppose any positive interference with the operation of the market forces of competitive enterprise.

As against this, the advocates of planning answer that the 'free market' dreamed of by this type of anti-planner does not and cannot exist, that there is no known way of preventing firms from acting together when such action offers prospects of higher profit, and that the anti-planners are in effect invoking the virtues of a quite imaginary economic order of their own devising in defence of an actual system which does not possess these virtues and does not in practice secure either that the resources of production are fully or sensibly used, or that a right distribution of industry and population is brought about, even from a purely economic point of view. The advantages and disadvantages of 'planning', they say, ought to be compared not with those of any fancy construction existent only in the minds of the advocates of *laissez-faire*, but with those of the

actual economic system under which we have been accustomed to live.

No doubt, the anti-planners would be fully entitled to argue in favour of their imaginary system of 'free enterprise', if they could show both that it would achieve the results they claim for it and that it could be made actual. But can they do either of these things? It is arguable that under primitive conditions of small-scale production, where no great masses of capital are needed and there are a large number of rival producers of each kind of essential goods, the highest production at the lowest cost will be secured by unregulated competition between these rivals. But it by no means follows that unregulated 'freedom of enterprise' can lead to the same result under more advanced technical conditions. Nor can it be left out of account that, even under fully competitive conditions, there is no guarantee that 'economic costs' will coincide with 'social costs'. To take a very simple case; if a factory belches smoke over a whole neighbourhood and compels everyone who lives in it to get his house re-painted more often as a result, the cost of the re-painting does not fall upon the factory owner, and is accordingly not taken into account when he is settling either the location of his factory or the methods of production which are to be applied. It is, however, clearly a social cost, which somebody has to meet; and it might pay better, and lower the social costs of production, either to put the factory somewhere where it would do less harm, or to compel the factory owner, at some cost, to install a smoke abatement device or to resort to an alternative method of production which would create less nuisance.

This simple example illustrates the divergence between economic costs (meaning costs which fall on the entrepreneur and influence his choice of location or method of production) and social costs (meaning all the real costs of production, on whomsoever they may fall). This divergence is to be found in many more complex forms, especially in industries which are carried on in great cities. Every firm which settles down in an already congested area adds to the costs of its neighbours, by slowing up transport and increasing the pressure on local services. It often adds to the costs of local government in the area in which it places its works; for congested populations usually mean

expensive service equipment. These are money costs which fall upon someone other than the entrepreneur, and are therefore left out of account when he is making his calculations of what will pay best. In addition, there are other social costs which cannot be estimated in money—loss of amenity through congested conditions of living, destruction of natural beauty, creation of unhealthy conditions, and so on.

This divergence between social and economic costs is in itself enough to make a large hole in the case put forward by the opponents of planning, and in particular to justify extensive measures of town and country planning designed to prevent undesirable location of industry and to insist on minimum conditions of sanitation, lay-out and, where possible, non-ugliness in the placing, design, and equipment of industrial establishments. Most anti-planners would admit this, up to a point, but usually with the reservation that the onus of proof of social undesirability ought to rest on the public authority—which means, in practice, opposition to giving town and country planning authorities any wide power to plan the lay-out of their areas in a positive or constructive way. The power to check definite nuisance is quite inadequate to prevent the ruin of any plan devised to increase the beauty and amenity and convenience of cities as places to be lived in: it can at most only be used to keep progressive deterioration in check. Town and country planners, if they are to act positively in raising standards and making their areas pleasanter and healthier, must have wide powers of zoning, of control over the design and lay-out of buildings and other forms of development, and of demolition of properties which, even if they are not insanitary or hideous, stand in the way of civic improvement based on a conception of the city as a living whole.

There are some who admit all this, and are as thorough-going advocates of town and country planning as they are opponents of economic planning. The State, they argue, has a full right to insist that economic forces must conform to social standards, but ought, subject to this *social* conformity, to leave business men free to manage their own affairs in response to the inducements offered them by consumers' demands. Social control, they say, is justified for the promotion of non-economic ends,

such as beauty or amenity or the preservation of health, but is not justified where it extends to an interference with the working of the free market beyond this point. But where is the line to be drawn? It has been abundantly proved in practice that the working of the free market will not bring about enough milk production to meet the needs of an adequate policy of nutrition. State intervention to bring about a greater consumption and production of milk can therefore be justified as part of a socially desirable policy of promoting the health of the public, just as the imposition of high taxes on beer and spirits has been used deliberately as a means of reducing consumption below what it would be if the market were left to operate without interference. There are few who still believe that food policy ought to be left entirely to the laws of the market, without any attempt by the State to influence production and consumption on social grounds.

What, then, of houses? The *laissez-faire* argument would presumably be that, if people really wanted more or better houses, they would bid up the price of houses until it paid building speculators to give them what they wanted. The fact that they do not do this proves, it is said, that they prefer spending their incomes on other things, and accordingly, the argument runs, they should be left to do this, and the State, in the interests of securing the highest possible production of 'utility' as measured by consumers' desires, should refrain from causing more and better houses to be built than would be built by business men responding to the forces of private demand. The trouble about such a policy, which was in fact followed in the main up to 1914, is that it leads straight to slumdom and gross overcrowding. The poorer families go on inhabiting houses which are fit only to be pulled down, or crowd into better houses which they speedily reduce to the condition of slums. They cannot afford better or less crowded houses without giving up something else which they do not want to give up—it may be beer or gambling, but it may equally be food which is necessary to their own and their children's health.

The State, recognizing these facts, has been driven more and more to subsidized housing. Politicians who have been reluctant to offer subsidies for ordinary working-class houses except under

conditions of dire emergency have had to accept subsidies for slum-clearance and the provision of alternative accommodation, and for the prevention of overcrowding in congested areas, as necessary parts of public policy, because they have had to agree that, whatever the 'laws of the free market' may prescribe, it is intolerable to allow the existing conditions to continue, and indispensable to enforce some minimum standards of healthiness and amenity. But slum-clearance and overcrowding subsidies were failing, in the 'thirties, to meet the need. It did not pay to build ordinary working-class houses for ordinary wage-earners nearly so well as it paid to build houses for better-off families; and accordingly there was strong pressure for a resumption of the ordinary housing subsidies which, conceded after the last war, were cut off by the Conservatives in the course of the world slump.¹

Housing, like nutrition, is of course a social as well as an economic problem; and State interference with the 'laws of the free market' as they affect housing can be justified on social grounds without conceding the general case for public economic planning. But again I ask where the line is to be drawn. If the State may take responsibility, on social grounds, for ensuring decent standards of nutrition and housing for the whole people, may it not take a similar responsibility in many other fields? Education goes nowadays without saying; and we are just setting about putting medical services into the same category of exemption from the laws of the market. But what about clothing, or, in quite a different field, what about the amenities of living in towns or villages, as distinct from mere house-room? It has come to be recognized that the State should take a hand in providing parks and open spaces, and that it will not do to rely on the 'laws of the market' by leaving it to private entrepreneurs to provide such parks as can be made to pay with the aid of turnstiles at the entrance. If parks, why not Village Halls, Community Centres, public theatres and opera houses, as well as Libraries and Art Galleries and Museums? We are just getting to the point of recognizing that a local authority which builds a housing estate ought not to leave it without some sort of Public Hall and Community Centre. But public policy

¹ See Chapter IV for a further discussion of this question.

still draws the line at theatres or cinemas, because there it comes face to face with business men who are providing the service, where it pays them to do so, on an economic basis.

The line has in fact been drawn, not in terms of services as against commodities—for many services are still left to the working of the 'free market', but in a complicated way between things which private enterprise can provide at a profit in sufficient quantities not to provoke an irresistible demand for a public, or a subsidized, supply, and those which it cannot. This obviously is not a fixed line; for it can be shifted a little whenever public estimates of what is the necessary minimum standard of living change; but the ease with which it can be shifted depends on the extent to which the interests controlling the private supplies expect to be benefited or adversely affected. Farmers and landlords are for the most part quite ready to see the State stimulate increased consumption of foodstuffs if they see a chance of getting subsidies or a protected market as a result; whereas milk distributors look askance at schemes for free or cheap milk for particular classes of the population because they fear that such schemes may either cut into their own markets or provoke a demand for cheaper supplies all round.

When housing is in question, special complications arise. The financial interests connected with the provision of houses tend to be against State subsidies because they fear their effects both on the demand for privately built houses and on the level of rents. Private builders are more divided in mind, and tend to favour public building, provided that it is carried out by contract, whenever times are bad. Even the financial interests do not object to public slum-clearance schemes or to the public provision of types of dwelling out of which they can see no prospect of making a profit. Many of them would like the State to confine its housing subsidies to dwellings of a low total cost, and to keep out of the more profitable field of higher-cost housing. Over the entire field, not only of housing, but of goods and services generally, any extension of State interference with the laws of the market meets with an opposition that is roughly proportionate to the profit-expectations threatened by it, or with a support proportionate to the hopes of subsidy to profits likely to accrue from it.

So far I have been speaking of forms of State interference designed to increase the total supply of a good or service, with the object of getting more of it into the possession of those who are recognized as having too little of it under the existing market conditions. A quite different issue arises when the purpose of State intervention is not so much to benefit the consumers directly as to increase the volume of employment. It used to be the regular argument of Protectionists that protection would result in a larger amount of employment, whereas Free Traders usually countered by denying this and urging that, though protection could of course increase employment in the protected industries, or at least in many of them, its effect must be to reduce total employment by raising prices to a height that would depress consumption. This, the Free Traders said, would happen because protection would shift resources from more to less productive uses, and would thus reduce the total product available for sale. They ignored the point, to which Protectionists constantly recurred, that even if real costs were raised total output might still be greater as a result of more people being employed. The argument in fact went round and round in an endless circle.

Now, protection by tariff or by any alternative method is of course a sort of economic planning, though it may be a bad sort. Protective tariffs or other devices are attempts by the State to secure increased employment of resources in particular industries, and are bound to affect the relative output of different classes of goods. The British tariffs enforced after 1931 and reinforced by a number of similar devices, did cause a considerable shift in the use of British productive resources, whether or not it added to the total brought into use. It brought about a considerable growth of home production of steel and of a wide range of manufactured consumers' goods; while the wheat quota, the Agricultural Marketing Acts, and other agricultural devices increased the output of British agriculture over another wide range of goods. The export industries, notably coal and cotton, suffered as a consequence of the restrictions on imports; and then some of the coalfields got a part of their lost trade back under the trade agreements which bound the Scandinavian countries to buy certain quantities of British coal. All this was

'planning', though it was 'planning' of a remarkably haphazard sort, and was governed almost entirely by regard for the interests of producers as against consumers. The contention of course was that the consumers would be indirectly served, because more employment would mean more purchasing power; and it was conveniently ignored that the protective system would provide a fine foundation for the rise of trusts and cartels which would raise prices instead of expanding output to the fullest practicable extent.

The trusts and combines duly made hay; but, partly as a consequence of their activities, the effects on total unemployment were disappointing. There arose the new doctrine—new that is, to most people, though it was really old—that the State ought to take the responsibility for maintaining 'full employment' not by means of protection, but by measures which would ensure that the total demand for goods and services should be kept steadily high enough to provide outlets for all the available labour. The methods recommended were partly financial—low rates of interest maintained by central bank action, adequate supplies of credit, the incurring of budget deficits in bad times—and partly industrial—the launching of 'public works' to counter any falling tendency in the total demand for labour, or subsidies designed to raise the level of private investment under the guidance of the State. At first, proposals that the State should guarantee the maintenance of 'full employment' were hotly contested by the economically 'orthodox'; but gradually the new ideas made their way, with the powerful backing of Lord Keynes, Sir William Beveridge, and other leading economists.¹

These new ideas, I have said, had both a financial and an industrial aspect. They made headway much more easily on the financial than on the industrial side. Most people, including most business men, found the notions of low rates of interest, easy credits, and tax remissions in bad times very acceptable; and the voice of orthodox finance, powerful as it is in action, is not very appealing in argument. Bankers are better at whispering prophecies of ruin into the ears of Prime Ministers

¹ See my book, *The Means to Full Employment*, for a consideration of the issues involved.

and Chancellors of the Exchequer than at convincing public opinion.

On the other hand, the industrial side of the new ideas met with a mixed reception. Business men did not like the notion of the State becoming a larger employer and invading new fields under the aegis of a 'public works policy', even if such a policy promised to raise the level of employment in bad times. The industrial side of a 'full employment' policy looked too much like the thin end of a Socialist wedge to be acceptable to many who were quite willing to see the State intervene further in monetary policy, so as to make credit cheaper and easier. To Socialists, of course, the industrial side of the 'full employment' idea made a strong appeal; but, the more they liked it, the more suspect was it elsewhere. The reaction to the New Deal in the United States was but the same thing, writ larger, as was going on in the minds of the business classes in Great Britain.

It became evident, however, that the idea of a 'full employment' policy had so caught hold of the public mind in Great Britain as to make its acceptance by any Government which wished to retain public confidence a *sine qua non*. It had to be accepted, at any rate in words. I think, however, that few people of any knowledge really believe that 'full employment' can be maintained entirely by monetary manipulation, including the manipulation of the Budget, without resort to public investment by the method of 'public works'. As soon as this is admitted, it follows that the State, if it is to invest in 'public works' in bad times in order to maintain the total demand for labour, must have at least a plan of public works—that is, a plan for the allocation of productive resources to certain forms of capital construction. This at once introduces into the economic system an element of economic planning, over and above what was involved in the kinds of piecemeal planning by tariff, or quota, or marketing board, or subsidy, that were being practised before 1939. It is an acknowledged fact that, in periods of depression, the demand for capital goods falls off much more sharply than the demand for consumers' goods: so that distress is largely concentrated in the industries and areas which specialize in the production of capital goods. If the State is to be armed

with a plan for correcting this lack of balance, the essence of it will have to be a plan for stimulating investment in types of capital goods in which the disused resources of production can be employed, or to which they can be readily transferred. This involves travelling a considerable way in the direction of comprehensive economic planning; for the industries affected—iron and steel, heavy engineering, shipbuilding, building and the rest—are the basic industries on which any general economic plan would largely turn. Add to them agriculture and the food trades, in which the State is committed to intervention largely on nutritional grounds, and you find yourself already committed to a pretty large planned sector of industry—a sector so large and influential that it cannot be planned without extensive repercussions upon almost all other industries.

Nor do these groups exhaust the list of our commitments; for we shall also find ourselves, after the war, under an absolute necessity of attempting to plan for a much larger total of exports than we could expect to secure if we continued to rely merely on the 'laws of the free market' in our quest for customers abroad. Unless we can, in one way or another, greatly expand our exports, we shall be compelled to import less, though we shall need all the imports we were bringing in before the war, even if we can provide by higher home production for any improvement in our standards of life. It was a highly anomalous situation that, in the years before 1939, Great Britain was failing to meet the cost of current imports out of the combined yield of its exports, the services of its mercantile marine, the financial services of the 'City', and the interest and dividends on its overseas investments of capital. Actually we were, in time of peace, selling off capital holdings at the rate of about £40 millions a year in order to square the account. We shall not be able to go on doing this after the war; for we shall have already used up most, if not all, of our saleable overseas assets, and there will be considerable accrued debts to overseas suppliers who have sent us goods without current payment during the war. Even if we set aside 'Lease-Lend' obligations to the United States, there remain large debts, represented by sterling balances in London, owing to India, Australia, Canada and other parts of the British Empire, as well as to Latin America.

Nor can it be left out of account that, if we follow after the war a policy of 'full employment', the demand for imports will increase. Industries working to full capacity will need more imported materials; more workers earning full-time wages will eat more and demand more goods, and in particular more imported goods or goods made largely of imported materials. Unless we can so expand our exports as to be able to pay for these increased supplies, we shall be compelled to refuse to allow this to happen, and to divert a part of the home consumers' demand for imports to goods and services that can be made wholly at home, or at least with a minimum of imported materials. How far we shall have to follow this policy of diverting demand to home products depends on the degree of success we meet with in expanding our exports. But, whether we have to bring about an expansion of exports or a diversion of demand to home products, it will be necessary to embark on very large measures of economic reorganization; and all the evidence derived from the inter-war period strongly suggests that the requisite reorganization is most unlikely to come about except as a result of deliberate planning and of positive measures enforced by the authority of the State.

In default of such measures, there can be only one outcome—a fall in the British standard of living. Such a fall could be brought about in more than one way. We might go back to a condition of persistent and widespread unemployment, and thrust the main burden on the unemployed by keeping them at a very low standard of bare subsistence—as we largely did between the wars. Or we might drastically cut wages, thus distributing the burden more evenly over the working class as a whole. Or we might, without changing money wages, lower greatly the external value of the pound, so as to make imports much dearer and reduce the consumption of them by putting it beyond the means of the main body of consumers to buy more than very limited quantities of them, or of home-produced goods incorporating a high proportion of imported materials. Not only the first of these policies, but the second and third as well, would be inconsistent with 'full employment'; for all alike would involve a fall in the consuming power of the mass of the people, on whom the maintenance of total demand principally depends.

This is not the place for following up the full implications of this argument.¹ My immediate point is that, in such a situation, it will be easiest for us to improve our standards of living in those respects in which higher standards make only small demands for increased imports of either materials or finished goods. The form of consumption to which this condition most clearly applies is housing space and use of buildings generally. Building is a highly 'labour-intensive' industry—that is to say, a large part of its product represents the labour employed—and, in the matter of materials, we can produce at home almost everything we need for it, except timber, of which we were always very short and shall be much shorter than ever before as a consequence of past neglect and of war-time felling. Even if timber must be imported, building is on the whole an industry which can be expanded in such a way as to create a comparatively small demand for imports in relation to the value created; and that is a reason for looking favourably on the idea of devoting a high proportion of our resources to it after the war. It would not, of course, be a valid reason unless we needed the buildings. But I think I have shown that we do need them, and that the need cannot be measured by the market demand which would exist if the State were to step aside and leave activity in the building industry to find its own level.

A post-war 'public works policy', therefore, should give building a very high place. But to urge this at once raises a further point. In the past, 'public works policy' has usually been thought of mainly as a means of dealing with cyclical depression—as needing to rise high when the total demand for labour falls off, and to sink, even to zero, when the level of total demand has recovered to a satisfactory extent. It is, however, evidently out of the question to plan a public housing policy on this 'counter-cyclical' basis, both because the need for houses will not fall off suddenly in the good years, and because building, as an industry dependent largely on skilled labour, cannot be suddenly expanded or contracted at will. It may be argued that the total level of building activity will not need to decline in good years, because private builders will be ready to

¹ See my book, *Great Britain in the Post-War World*, 1942, where it is followed up.

step in as fast as the State steps out. But this is not the case; nor, even if it were so, would the difficulty be met. Private builders, if they did step in, would do so to undertake mainly different kinds of building from those undertaken by the State, especially in the housing field. There would be a sudden decline in the supply of new working-class houses available for letting at weekly rents, just when greater general prosperity was making more wage-earners desirous of setting up homes of their own.

In effect, building activity, in the field of housing, can be adjusted to the needs of a counter-cyclical policy only by careful planning. There is a large volume of house-building that must be maintained, in order to meet the needs of the people, in good and bad years alike; and this building includes a large part of that which will have to be carried out under the auspices of the State. There are, however, other forms of building activity which can be advanced or retarded much more easily. The demolition of obsolete buildings, including both houses and factories, schools and public buildings, and the re-planning of congested or unsightly urban areas can be proceeded with more or less rapidly according to the amount of resources that can be spared from other uses. The limits to such expansion or contraction are set by the factor of skilled labour. Total building activity cannot be expanded rapidly beyond the capacity of the available skilled labour force; nor can it be without disaster contracted rapidly so as to throw large numbers of not easily transferable skilled craftsmen out of work.

It is a matter for careful planning to find out what these limits are, and thus to determine the extent to which the kinds of building that can be speeded up or delayed can be used as a factor in planning on 'counter-cyclical' lines for the maintenance of full employment. In any case, for some time to come no great use can be made of building in this way, for the simple reason that the minimum demand which cannot be postponed is certain for some time to equal the total capacity of the industry. The time for using building as a makeweight in the demand for employment will come only when the arrears have been overtaken and the essential tasks of re-building done; and that will not be for at least a dozen years after the end of the present war.

Accordingly, in the short run the planners for full employment will have to look elsewhere for industries which can be speeded up or slowed down to offset fluctuations in the total demand for labour. This will force them to plan production over a wider field than would be indispensable if the building industry were available for counter-cyclical use. Now, building has bulked so large in the past in conceptions of 'public works policy' that this fact is bound to make a very big difference. It will force the State into embarking on public works in other fields, in which greater opposition is likely to be encountered from established private interests. It will widen the range of economic planning and will knock yet another nail in the coffin of *laissez-faire*.

The case for a large measure of planning in post-war economic and social reconstruction rests also, as I said in the opening chapter, on the plain fact that Great Britain stands in need of extensive readjustments in its economic structure and on the certainty that these readjustments 'cannot be brought about in a socially satisfactory way, if at all, by the unplanned operation of private economic forces. It is an incontrovertible fact that, over the two decades between the wars, the changes rendered necessary by technical development and by the alteration brought about in Great Britain's world position by the war of 1914 to 1918 were not effected either with any completeness or, where they were effected, without the infliction of a great deal of unnecessary suffering. The evidence for this is to be found, first, in the high average level of unemployment in the country as a whole, and secondly, in the persistence of severe depression in a number of areas largely dependent on industries which failed ever to regain the world position which they held before 1914. High unemployment maintained over a long period of years and continuing even in relatively prosperous periods furnishes clear evidence of serious economic maladjustment. It means that the country as a whole is not equipped to produce goods and services in the right proportions and that it is failing to produce up to the measure of its real productive capacity. The existence over a similar period of a number of exceptionally depressed areas is further evidence of maladjustment and of a failure of adaptability in the economic system, and is the

more serious because of its deplorable social and human effects.

In twenty years Great Britain did not succeed, by the methods of *laissez-faire* modified by occasional resort to half-hearted and piece-meal sectional 'planning', in catching up with the need for structural readjustments that existed in 1919. Now, as the sequel to a second war, wider in its range and more decisive in its economic effects on Great Britain, there arises the need for much larger structural changes. What hope is there that the methods which lamentably failed between 1919 and 1939 will be effective in dealing with the much more difficult economic problems that will very soon have to be faced?

War has two main effects on the economic position of a belligerent country. In the first place, it causes a distortion of the structure of production to meet quite abnormal demands. The industries which produce munitions of war have to be immensely expanded: labour has to be drawn away in large quantities from other industries in order to supply their needs: there has to be a similar diversion of materials; and the making of new capital goods has to be concentrated on providing for the expansion of the war industries, while other industries have to make do with their pre-war equipment, without opportunity either of renewing worn-out or obsolescent plant, except on a very small scale, or of introducing improved types of plant. Consequently, when the war ends, the country is left with a great deal of fairly new capital equipment that is of little or no use for meeting peace-time demand; and the industries which are called upon to expand their output of goods for civilian consumption find themselves with a serious deficiency of reasonably up-to-date equipment and are under the necessity of undertaking large measures of capital development in order to be able to produce at reasonable cost. Secondly, war, if it is so waged as to involve all a country's resources, means that normal exports have to be drastically curtailed, both because materials and machinery cannot be spared for them and because the labour which they normally employ is more urgently needed elsewhere. Consequently the countries which have previously purchased these exports find their supplies cut off, and have either to seek alternative supplies or to undertake the production them-

selves if they are not prepared to go without. This means that when, after the war, the belligerent country tries to resume its pre-war export trade, there is fresh competition to be faced from the new suppliers who have entered the market or from the native industries which have been set up in the importing countries. These latter in many cases secure the protection of a tariff or of some other form of restriction on imports; and both they and the rival exporters who have entered the field may well be better equipped because they have been able to install up-to-date equipment while the exporting industries of the belligerent country have been out of action.

Of course, exports do not sink to zero even in time of war. How far they can be allowed to sink depends greatly on the financial situation of the country which is waging war. Imports will be needed to supply those needs of the war industries and of the consumers—including the armed forces—which cannot be met from home sources; and if these imports have to be paid for at the time exports must continue to be sent out in payment unless there are other means of footing the bill. A country such as Great Britain, which depends mainly on imported raw materials and largely on imported foodstuffs, is bound to need very large imports in time of war. Some of these may be obtainable without current payment—on loan or lease-lend terms; but the rest will have to be paid for either by means of exports or by the surrender of gold or of capital assets. The British gold supply could not go far towards meeting these claims; but they could be met to a great extent by the sale or pledging of British-owned capital assets overseas. The existence of these assets made it possible for Great Britain to dispense with exports to a much greater extent than would have been possible if there had been no such holdings, and thus to carry further the diversion of British industry to direct service in the war effort. This, however, means both that the difficulty of re-building export trade after the war will be all the greater and that more exports will be needed to pay for post-war imports. In the past, Great Britain has paid for imports partly out of the interest and dividends accruing on British-owned capital assets abroad. This source of income will have been seriously reduced, if not wholly wiped out as a net asset, by the time the war ends; and

accordingly British power to pay for imports will be much smaller unless exports can be not merely restored to the pre-war level but greatly increased. The difficulty is aggravated by the fact that most British exports, except coal, are made largely out of imported materials, so that an increased volume of exports involves increased imports as well, and the gross increase needed in exports in order to achieve a satisfactory balance is therefore considerably in excess of the net increase.

I have reckoned elsewhere¹ that, in order to maintain the pre-war volume of imports for home consumption, it will be necessary to come near to doubling the gross volume of British exports. How is this to be done? During the period between the wars Great Britain was losing and not gaining exports. The decline in exports of cotton goods—the largest single item in British export trade and, over the past century, by far the largest—so far from being made good after 1918, continued almost uninterruptedly throughout the inter-war years. Coal exports declined sharply; and so did exports of ships. Iron and steel exports also fell off: so did exports of most kinds of machinery and of woollen and worsted manufactures. These were by far the most important groups of exported British products; and in every case we were failing to hold our own in the world market before 1939. Is there any reason to suppose that we shall fare better after the war—let alone that we shall be able to double the volume of our exports—unless we can either do something very drastic in the way of cutting our costs or find new exports to take the places of those for which the overseas demand has declined?

Exports cannot be sold in the world market, on anything like the scale required, except at competitive prices. Tariffs and similar devices, so far from affording any help to exporting industries, hamper them by provoking retaliatory measures in other countries. Trade Agreements can sometimes be used to help particular groups of exporters; and, of course, Imperial Preference has been an important factor in enabling British industry to retain its position in the markets of the Dominions and of the Empire generally. But it is too clear to need any argument that exports on the scale on which Great Britain will

¹ See my book, *Great Britain in the Post-War World*.

stand in need of them after the war can be obtained only if British products are being offered all the world over at prices which compare favourably, quality for quality, with those of the products of other industrial countries. It is also clear that the required level of international trade cannot be secured unless British industry is alert and inventive, and able to put itself well in the forefront with the offer of new products and new varieties of old products over a very wide field. It is futile to look to cotton and coal to regain their old positions as leaders among the British exporting industries. The greater part of our lost markets for cotton piece goods in the Far East will never be regained; for the cheaper classes of such goods can be produced by cheap labour using the most up-to-date machinery in the less developed countries at prices with which Lancashire cannot possibly compete. Our coal trade may make a larger recovery; but here too our costs are high in comparison with those of Poland, and our quality advantage has diminished as a result of changes in the methods of fuel utilization. The more we can do to put the mining industry in better order—after a quarter of a century of futile tinkering with its problems—the better our chances will be. But, even if we do the best we can, coal cannot be expected to make any big contribution to the greatly increased total volume of exports that we shall need.

What, then, are we to export, in quantities sufficient to solve our very difficult problem of balancing our international accounts? There is no simple answer to this question, because the answer is not to be found in any single industry or small group of industries, as it has largely been found in the past, but rather in a great and growing diversification of exports of those kinds in which skilled labour and advanced and adaptable techniques count for most. It goes without saying that most products which are of these kinds are not elementary necessities, but are either capital goods or consumers' goods of relatively high quality or such as are in large demand only among relatively prosperous consumers. Accordingly, Great Britain's chance of getting the needed volume of exports depends very greatly on the prosperity of the rest of the world and on the rate at which capital development is proceeding, especially in the less developed countries. If the poorer countries are able,

after the war, to set out upon large plans of capital development, they will be ready to take large quantities of machinery and equipment of all sorts in exchange for their primary products, over and above what they borrow by way of international loans; and as their prosperity increases as an outcome of this capital development, they will become good markets for a wide range of consumers' goods—products of highly skilled labour—which they will not be able to produce at home except at prohibitive costs. Accordingly, Great Britain has an overwhelmingly strong interest in promoting the economic advancement of the countries which are her best potential customers, but are at present too poor to buy the goods which British industry can supply.

World prosperity alone, based on a world policy of 'full employment', is not, however, enough to secure Great Britain's position in the markets of the world. It is a *sine qua non*, but not in itself a guarantee. British exports will not rise high enough to meet the need, however prosperous the world may become, unless they are offered at satisfactory prices and with a continual adaptation to new discoveries and to changes in consumers' demands. These conditions mean that British industry will need after the war extensive structural adjustments, both for the elimination of obsolete factories, in which production cannot possibly be carried on at reasonable cost, and for the development of new products and processes with the aid of the best that modern science and technology, based on research, can do in the way of equipment and environmental arrangements. This need has an obvious bearing on the problems of physical reconstruction. We shall have to clear away the obsolete factories which congest our industrial towns, not only because they are unsightly, insanitary and a bar to good living conditions, but also because they are inefficient. We shall need to plan new towns and well-laid-out factory estates, not only because they can be made much better places to live in and work in than most of our existing industrial districts, but also because they will be able to produce better goods at lower cost.

These things will not be done if we trust for the doing of them to the unregulated workings of the 'free market'. They cannot

be done by unaided private enterprise, because most firms simply cannot afford to do them, and are by no means in a position to raise, or borrow, the capital required. They can be brought about only as part of a policy of planned investment whereby the State, having surveyed the needs and possibilities of industrial development, takes in hand, either directly or through public bodies acting as its agents, the task of getting the new towns built and ensuring the supply of the capital needed for constructing and equipping the new or transferred factories which will provide employment for the inhabitants attracted to them. Economic planning is indispensable, not only as a means of improving the amenities of industry or of adapting industrial structure to the changing requirements of the home market under a policy of 'full employment', but also, and perhaps most of all, as a means of enabling the British public to purchase with the products of its own labour the imports which are essential to the maintenance and improvement of its standard of life.

The anti-planners will say that this chapter contains no valid theoretical answer to their case against economic planning. Nor does it; for no such answer is needed. The answer to them is that, even if all they said were theoretically true, it would have no practical bearing, because the conditions of perfect competition which they postulate never have existed and never can exist. The case for planning is based on practical considerations—on the need, in certain fields, to expand actual demand beyond the level at which it would stand if the State took no action to increase it; on the need, no less urgent, to maintain total demand at a level high enough to ensure continuous full employment of the available productive resources; and, last but not least, on the need to expand exports to the total required to pay for necessary imports. It is no way of meeting these needs to point to the abstract perfections of a non-existent system of perfect economic freedom, in which men and things alike can be pushed about as easily, and with as little resistance, as draughtsmen on a board. Things cannot happen so in reality; and our task is to deal as best we can with the actual problems that press hardest upon us. That is the belief in which this book is written; and I venture to say that the real question is not whether we shall

plan or not, but whether we shall plan well or ill—with a wise synoptic vision of national needs and possibilities, or merely piecemeal, as we allow ourselves to be pushed in this direction or that by one sectional interest after another. We shall be compelled to plan: let us see to it that we plan well.

CHAPTER IV

THE LESSONS OF EXPERIENCE

BETWEEN the two wars there were built in Great Britain over four million new houses—about one-third of the total number that existed in 1939. The Census of 1931 gave a total of rather more than $10\frac{1}{2}$ millions, and more than $2\frac{1}{2}$ millions were built between then and the outbreak of war. Allowing for demolitions, twelve million houses will serve as a round estimate of the number existing in 1939.

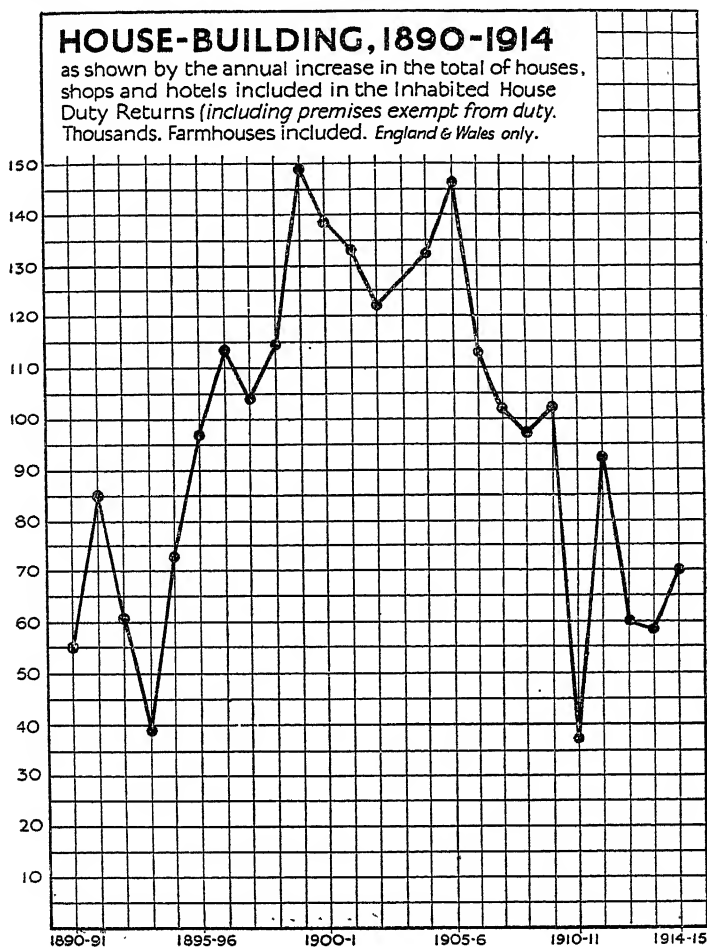
This re-housing of a third of the total population over a period of twenty years may seem at first thought a remarkable achievement. It has, however, to be borne in mind that in 1919 the housing situation was very bad indeed, not only because house-building had been practically suspended for some years but also because the rate of new construction for some time before 1914 had been much too low even to provide for current needs, apart from any attempt to improve housing standards. There are unfortunately no reliable statistics of house-building before 1914; but it is possible to get a general idea of the position from the returns made in connection with the Inhabited House Duty.¹ These include inhabited shops, hotels and similar buildings, as well as ordinary dwelling-houses, and exclude farm-houses; and of course the figures derived from them are net and not gross. Houses demolished or abandoned do not come into them; and accordingly they show something less than the aggregate of new building. But for our present purpose these points are unimportant: we can get from the returns a sufficiently clear notion of what was happening.

Between 1890 and 1914 the net addition to the number of houses in England and Wales did not in any year reach 150,000. It averaged under 63,000 from 1890 to 1895, 115,000 from 1895 to 1900, 131,000 from 1900 to 1905, 112,000 from 1905 to 1910, and under 64,000 from 1910 to 1915.² This was obviously much

¹ See Chart opposite.

² The figures are for financial years, ending in March of the years named.

too low a rate of increase, exceeding 2 per cent. only in two years—1899-1900 and 1900-1901—and falling to about three-quarters of 1 per cent. in the years just before 1914.



The consequence was that there existed in 1914 a high proportion of houses that were already old, as well as very serious overcrowding. Then came the war, stopping new building,

preventing demolitions of obsolete dwellings, and intensely aggravating a situation which was already deplorable. Between 1891 and 1901 the Census showed an increase of over a million houses in Great Britain: between 1901 and 1911 it showed an increase of 957,000, but between 1911 and 1921 the increase was only 435,000.

There was then, in 1919, an enormous housing problem waiting to be met. How was it met? Again, there are no accurate figures of house-building for the years immediately after the First World War; but we do know that up to March 1922—that is, well over three years from the Armistice, the total number of new houses built added up to only about 170,000, including those built by unassisted private enterprise as well as those built with public financial aid. During the first full financial year after the end of the war—up to March 1920—the total output was only about 6,000 houses. The following year it was about 40,000, and the year after that—up to March 1922—about 125,000.

This is an ominous precedent; but there is worse to come. The total, instead of advancing from 125,000, fell back in the two following years to 103,000 and 93,000. This fall was, of course, the consequence of the post-war slump and of the doughty wielding of the Geddes Axe by the champions of 'economy'. More than five years after the end of the war the total number of new houses that had been built was only 367,000—not much more than a year's output at the rate reached in the middle 'thirties. Such was the fate of the grand promises of 'Homes for Heroes' made by Mr. Lloyd George and others at the General Election of 1918.

Of these 367,000 houses built up to March 1924, the local authorities up and down Great Britain had erected about 192,000, or rather more than half. Another 50,000 had been built by private enterprise with the aid of State subsidies; and the remaining 125,000 had been built by unassisted private enterprise. The entire public effort, including subsidies to private persons, had yielded only 242,000 houses. Moreover, these houses had been built at a prodigious cost. In August 1920 the average cost of a non-parlour house with three bedrooms was £930, and in March 1921, after the fall in prices had begun, £855. A year later it had come down to £436, and by 1930 it had fallen by further stages to less than £350.

TABLE I
HOUSE-BUILDING IN GREAT BRITAIN, 1919-1939

Date	Local Authorities E. and W.		Local Authorities Scotland		Private Enterprise E. and W.		Private Enterprise Scotland		Totals
	With State Aid	Without State Aid	With State Aid	Without State Aid	With State Aid	Without State Aid	With State Aid	Without State Aid	
1918-19	—	+	—	+	—	—	—	—	—
1919-20	576	+	—	+	139	—	—	—	6,000 ¹
1920-21	15,585	+	1,201	+	12,964	30,000	364	—	40,000 ¹
1921-22	80,783	+	5,796	+	20,288	—	1,289	3,416	125,000 ¹
1922-23	57,535	+	9,527	+	10,318	23,800	765	—	105,000 ¹
1923-24	14,353	+	5,233	+	43,111	67,564	223	1,584	93,268
1924-25	20,624	+	3,238	+	47,045	69,220	1,785	1,853	143,765
1925-26	44,218	+	5,290	+	62,769	66,439	3,800	1,839	184,355
1926-27	74,093	+	9,855	+	79,686	63,850	3,995	3,501	234,980
1927-28	104,034	+	16,458	+	74,548	60,332	3,177	2,960	261,509
1928-29	55,723	+	13,954	+	49,069	64,740	3,087	1,937	188,510
1929-30	60,245	+	13,023	+	50,124	91,691	3,701	1,310	220,094
1930-31	52,514	360	8,122	+	2,565	125,368	3,061	1,510	193,500
1931-32	67,576	2,485	8,952	+	2,333	128,418	2,976	1,790	214,530
1932-33	54,566	1,425	12,165	+	2,493	142,012	3,910	2,686	219,257
1933-34	55,840		16,503		2,913	207,869	8,368	2,392	293,885
1934-35	41,593		15,733		1,139	288,374	—	6,096	350,935
1935-36	52,357		18,129		222	272,281	—	7,326	350,315
1936-37	71,740		15,683		797	273,516	—	8,167	369,903
1937-38	77,976		14,077		2,553	257,081	—	7,951	359,638
1938-39	—		—		—	—	—	—	—

+ No figures; but the numbers are small.

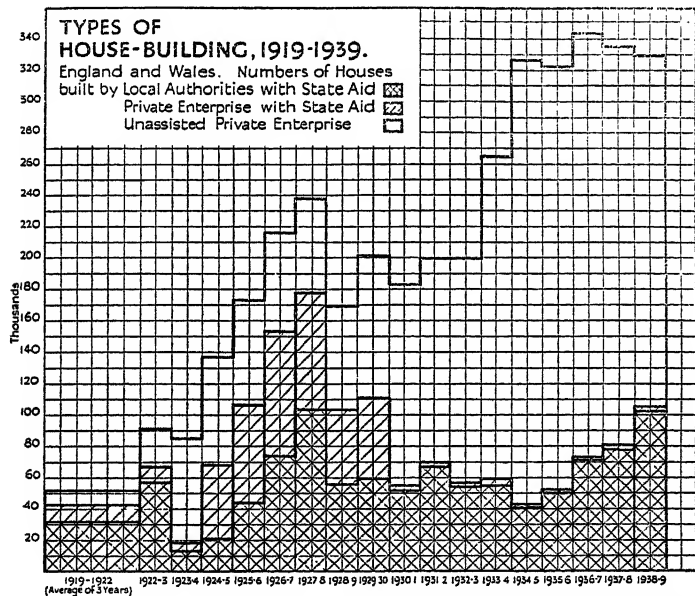
¹ Estimated.

This inflation of costs was, of course, the reason given by the Government for breaking off short the housing programme launched in 1919. Under the Addison Housing Act of that year, the local authorities were made responsible for carrying out the greater part of the Government's housing programme, but were given no incentive at all to keep down the price. The local authorities were called upon to make a fixed contribution to the cost of the houses built under their ownership, but beyond this the Government footed the rest of the bill. This was done, no doubt, with the purpose of giving the local authorities the largest possible inducement to get houses built quickly; but, as we have seen, it lamentably failed in achieving this result. The houses built under the original Addison Scheme and the supplementary scheme launched later in 1919 numbered only 214,000 in all. They were both few and excessively dear; and Sir Alfred Mond (later Lord Melchett), to whom as Addison's successor it fell to wield the Geddes Axe at the root of the tree of public house-building, had on the score of excessive and extortionate costs ample warrant for putting a stop to the scheme in its original form.

Why were housing costs so grossly inflated during the post-war period? It is a part of the answer that in 1919 and 1920 practically all costs were being similarly forced up. In March 1920 the average level of wholesale prices was more than three times what it had been in 1913, and even this was not quite the peak. A year later, in March 1921, the average wholesale price level was only a little more than twice as high as in 1913. It had fallen in a single year by nearly a third; but the cost of building had not fallen with it. Why should it fall, as long as the local authorities could pay any price they pleased, and then look to the State to foot the bill?

Only a part of the inflation of building costs was attributable to profiteering. Profiteering there of course was, on a very large scale, both by master builders and, fully as much, by the suppliers of all sorts of building materials and requisites. Bricks, cement, joinery, stoves, cisterns, pipes—in effect, everything that goes to make a house—rose to fantastic prices under the control of rings and combines which excluded all real competition. If the houses were few the need was all the more to make

a high profit on each house; and practically everybody acted in accordance with that principle. But it cannot be left out of account that prices were high, not only on account of profiteering, but also because in every industry output per man-hour was absurdly low. In 1919 and 1920 it seems as if hardly anybody was doing a reasonable day's work. Disorganization and inefficiency in the factories, which were largely making do with obsolete or worn-out plant, accounted for a good deal; but



over and above this there was everywhere a tendency to take things easy—to overman jobs as well as to go slow on them—as a reaction from the hurry-scurry of war work and as a reflection of a mood of cynicism and disillusionment which affected all classes alike.

A bricklayer was laying in 1920, on the average, about a third as many bricks as in 1913, and was earning about two and a half times the wages. Nor is there any reason to suppose that the bricklayer was doing any worse in this respect than other workers, on the job or in the factory, who contributed to the

make-up of building costs. If there were few houses, so were there few of most other things: if houses were dear, so were most things dear—until the slump came. Then output went up, because employers had to cut their costs and increase their efficiency if they were to avoid bankruptcy, and workmen had to work harder if they were not to get the sack.

In due course, to the accompaniment of slump and unemployment, costs were brought down, in the building industry as well as elsewhere. But they did not come down to such a point that it was possible for the Government merely to stand aside and allow building activity to find its own level. The need for houses was much too urgent for such a policy to be possible; and a period of falling wages and unemployment was not one in which many people could afford to pay higher rents. Building of new houses had to be subsidized, albeit on a less extravagant basis than under the scheme of 1919. Moreover, rent control, which had been introduced during the war, had to be maintained, desirous as the Government was of getting rid of it; and the existence of controlled rents for the older working-class houses was a factor in keeping down the rents which it was practicable to charge for the new houses built under the State scheme. Accordingly, in 1923 Neville Chamberlain's Housing Act was passed, with the primary object of decreasing the necessity for house-building by local authorities and of stimulating private enterprise by the offer of subsidies corresponding to the changed level of house-building costs. This Act was fought by the Labour Party, which both disliked the subsidies to private builders and preferred publicly owned houses, and also wanted new houses to be built for letting, whereas under the Chamberlain scheme they were built mainly for selling on the instalment plan. The Conservatives, then as later, were the advocates not only of private as against public enterprise in the field of housing but also of individual house-ownership as a way of giving the house-owner a 'stake in the country'. There will be an opportunity later of discussing this issue.¹

In 1924, before there had been time for the Chamberlain Act to get fully under way, the first Labour Government passed the Wheatley Act, which provided subsidies, at a higher rate

¹ See Chapter X.

than the Chamberlain subsidies, for local authorities which were prepared to build houses to let at controlled rents. Thereafter for some time these two Acts remained in force side by side; and under one or other of them the bulk of house-building during the next few years was carried out. Total house-building rose from the low point of 93,000 in 1923-24 to over 260,000 in 1927-28, mainly as a result of the stimulus given to the local authorities by the Labour Government. Over this period of four years about 825,000 houses were erected, at the rate of 208,000 a year; and of these about 278,000 were built by local authorities, about 277,000 by subsidized private enterprise, and about 270,000 by private enterprise without the aid of the State. This rate of house-building was a considerable improvement on what had been done before, and was achieved largely as a result of the 'treaty' which John Wheatley, the Labour Minister of Health, concluded with the building industry in 1924. Under the terms of this treaty, the Government pledged itself to raise house-building activity to a high level and thereafter to maintain it until the housing shortage had been overcome, while the operatives' Trade Unions accepted a scheme of dilution, to which they had objected in the absence of long-term guarantees, and agreed to play their part in training the additional skilled operatives who would be needed to carry through the enlarged programme.

Unhappily, the Government's pledges were not kept; and from 1927 the level of house-building was allowed again to fall back.¹ The Conservative Government did not like the Wheatley Scheme, and did all it could to discourage its use. For a time, the number of subsidized houses built by private enterprise under the Chamberlain Act continued to increase; but from 1928 this too fell off. Total house-building declined from over 261,500 in 1927-28 to 188,500 in the following year. There was a slight recovery to 220,000 in 1929-30, mainly due to an increase in unassisted private building, which had come back to fill part of the gap left vacant by the restriction of public activity. But, though unassisted building continued to advance in 1930-31, total house-building again declined, owing to a sharp further contraction in assisted building. The

¹ See Chart on page 98.

Chamberlain Scheme was brought virtually to an end under the second Labour Government; and there was no increase under the Wheatley Scheme to compensate for this cause of decline. The world slump was setting in, bringing with it a fresh 'economy' campaign, which culminated under Ramsay MacDonald's so-called 'National' Government in 1931 and 1932.

Under these disheartening conditions, the total rate of house-building, which had exceeded 260,000 in 1927-28, averaged under 205,000 during the next four years. Of the 817,000 houses built during these four years, unassisted private enterprise accounted for over 417,000, local authority building for about 284,000, and assisted private enterprise for only 116,000. As the unassisted private building was mainly of dwellings for sale at prices beyond ordinary working-class means, this meant that very little was being done to remedy the serious shortage of working-class houses, which had in fact been getting worse despite the retention in use of many obsolete dwellings. The better-off householders moved into new houses, which they bought at somewhat high prices with the aid of loans from Building Societies or Insurance Companies, or in a small number of cases from local authorities under the Small Dwellings Acquisition Acts. Families rather less well-off moved into the houses vacated by these purchasers of the new houses; and others still less well-off moved into dwellings vacated by the second group. There was a certain amount of shifting up; but the acute shortage of the cheaper houses meant that pressure for accommodation remained acute at the lower end, and that nothing much could be done to demolish houses which were not really fit for habitation.

In 1932-33 there was no substantial change in the situation. Then came, in the following year, a sharp increase in the total amount of house-building, and this increase continued during the next few years. The peak in the number of houses erected was reached in the year 1936-37, when the total mounted to nearly 370,000. During the four years 1934-38 the aggregate of houses built was 1,432,000, or 358,000 a year—an increase due almost wholly to the very rapid rise of unassisted private building which followed upon the sharp fall in interest rates in

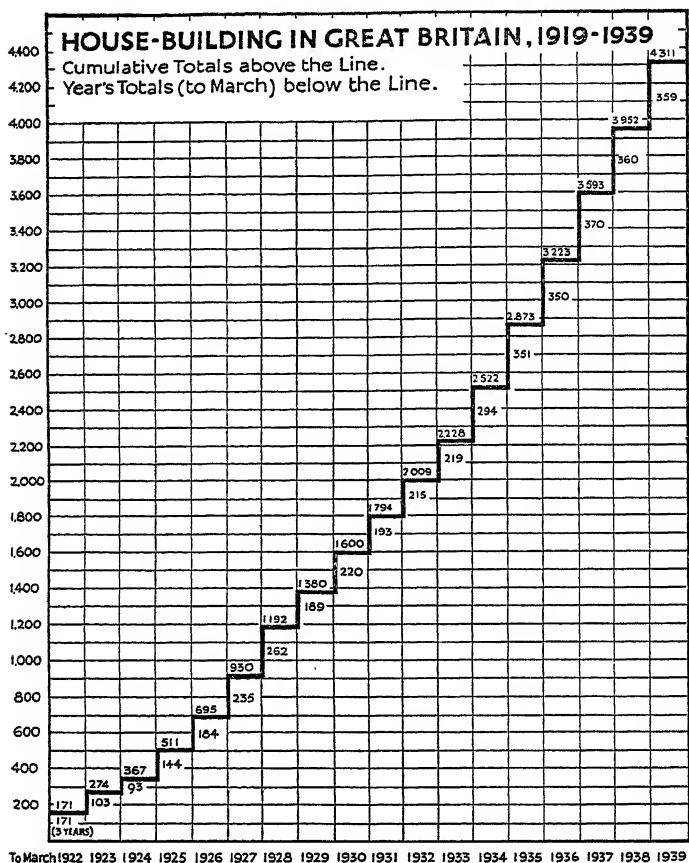
1933. In the course of these four years unassisted private building accounted for nearly 1,120,000 houses, whereas building by local authorities accounted for only 308,000 and assisted private enterprise for the very small residue. The State, during this period, was confining its aid to slum-clearance schemes and, latterly, to special schemes for the reduction of overcrowding in districts in which the Overcrowding Census of 1936 had revealed particularly bad conditions. It was doing nothing to assist ordinary housing, which was left entirely to the speculative builder aided by private finance.

The house-building boom of the nineteen-thirties showed clearly that houses could be built in very large numbers by private enterprise without the aid of subsidies, and that there were large numbers of persons who were prepared to purchase houses built in this way, despite the high annual charges which they had to meet. This boom in private enterprise housing was made possible by the reduction in gilt-edged rates of interest which was brought about in the course of the world depression and by a financial policy which kept these low rates in being after the general recovery from the slump had set in. This is not to say that the main body of house-purchasers on the instalment plan were able to get accommodation at low rates of interest. They paid quite high rates, to the profit of those who invested their money in the Building Societies through which most of the purchases of small and medium-sized houses were financed. What the fall in general interest rates did was to provide the speculative builder with a comfortable margin, without making the price of houses so high as to deter purchasers from buying up the new houses as fast as they were built.

Actually, costs of construction rose in the course of the housing boom. For non-parlour houses, average costs had fallen in 1932 and 1933 to a little under £300. By 1936 they were back at £327, and in 1937 there was a further sharp rise to £363. But the lower interest charges on the locked-up capital meant that the house-purchasers did not, until 1937, feel the effect of the increase; and thereafter the boom in private enterprise house-building began gradually to recede.

The boom of the 'thirties, being based on private enterprise and the production of houses for sale, repeated the experience

of the earlier advance in both unassisted and assisted private building. It catered mainly for the needs of the middle classes and of the top strata of the working class, and led to the erection



of relatively few houses which could be rented by the less well-to-do or the irregularly employed. It was concentrated to a great extent round Greater London and a few other big cities, and in the prosperous South, which was drawing population from other parts of the country; and though in its later stages

the approach to saturation point in the supply of the more expensive dwellings was inducing speculators to build cheaper houses in some of the less well-to-do areas where the demand was markedly falling off, the high costs of Building Society finance made this policy difficult to apply on an extensive scale. In 1939, as in 1919, the most acute shortage was in the cheaper houses, and the class for which least had been done was that which stood just above the slum-dwellers and a long way below the social grades which could hope to find accommodation on the type of estate usually developed by the private builder.

It will be seen from the accompanying chart that from the end of the First World War it took nine years to build a million houses, thirteen years to build two million, seventeen years to build three million, and twenty years to build four million. The average rate of building over the whole period was about 200,000 houses a year; but the rate for the first seven years was under 100,000, and it took twelve years to reach a cumulative average of 150,000. As against this, the rate from 1935 to 1939 averaged over 360,000.

The purpose of this recital of past history has been to illuminate the future, by drawing attention to the dangers of repeating old mistakes. Let us now try to see what are the outstanding lessons to be drawn from the record.

In the first place, the building industry is among those which suffer most severely in time of war, not only from a diversion of its activities to war work, but from contraction of the skilled labour force on which its efficiency depends. Such constructional work as is allowed to go on in time of war is largely of a civil engineering rather than a building type. There are aerodromes and camps to be built in large numbers; but the work on them requires a relatively small proportion of workers belonging to the skilled crafts which are of most importance in house-building. Factories for war production have also to be built; but, at any rate in the present war, the programme of factory construction reached its peak at a fairly early stage and was then rapidly scaled down, to the accompaniment of an extensive calling up for the armed forces of the younger building workers. Moreover, the work done in building factories and hostels in time of war is organized largely on mass-production

lines which differ greatly from the conditions of ordinary house-building, and require less skill. The speed exacted, however, is high, and the application of piece-work conditions to what are ordinarily time-working trades, as well as the repetitive character of the work, in practice interferes seriously with the proper training of apprentices. The number of apprenticed craftsmen falls off sharply, and those who remain are in general worse trained. Many skilled men drift away to other war occupations, from which it may be difficult to get them back; and the average age of those who are left is high, so that there is a high annual rate of wastage through death and retirement—or at any rate a high potential rate of wastage at the end of the war, even if retirement is in many cases temporarily deferred owing to the general shortage of labour. At the same time, the ranks of the small, jobbing builders, who in normal times are responsible for a large part of the work of repairs and decorations, are heavily depleted, though under the conditions of the present war, a substantial nucleus force has to be kept to deal with air-raid damage.

In view of these factors, the building industry is bound to emerge from the war with a greatly reduced labour force, and particularly with a serious shortage of skilled craftsmen. If the methods of post-war house-construction are to be approximately the same as those which were in use before the war, this shortage of craftsmen will be especially formidable; for house-building was the section of the industry which employed much the highest proportion of skilled workers. On this assumption, the shortage would be severe even if the craftsmen who were available worked as fast and as well as they were working in the 'thirties. But, in the light of the experience of the years after 1918, it would obviously be rash to assume this. The mistake of the Addison Housing Scheme, which came near to putting a premium on inefficiency, is doubtless unlikely to be repeated; and it may be assumed that the State will not, after this war, put itself in the position of signing a blank cheque for the benefit of builders and suppliers of builders' materials and requisites. It does not, however, follow that there will not be an inflation of costs and prices. The forces of post-war weariness and inefficiency are quite likely to reassert themselves, unless special

measures are taken against them; and some degree of inefficiency in the early stages is probably unavoidable in view of the depletion of the skilled labour force and the decline of apprenticeship during the war years.

It may be argued that this need not happen if there is an extensive resort to new methods of construction which will economize in the use of scarce types of skilled labour and, by pre-fabrication in factories and mass-production methods on the site, will introduce a new tempo into house-building. I shall discuss this question later¹; but it would be unwise to count too much upon it in relation to the key problem of constructing the house-shell for permanent dwellings, however important a factor it may turn out to be for other types of building or for the construction of temporary houses to meet the immediate emergency. Nothing much came of a great deal of talk about new methods of house-building after the last war; and even if a good deal more comes of the talk and the research that are proceeding now, the difficulties of scaling up the building industry to meet the tasks that will be required of it will remain quite formidable enough.

A second plain lesson of the experience of the twenty years between the wars is that building needs to be tackled from the outset as a long-term problem and planned well ahead over a longish period of years. There are several reasons for this. The most important of all is that it is the only way of getting the builders themselves into a mood in which they will collaborate heartily in the carrying out of the programme. Any large building programme is bound to require exceptional measures for bringing a large number of additional workers into the industry and training them to do skilled men's work. These newcomers will have to work side by side with the skilled men who are already in the industry, or will be returning to it after the war, and will have to learn from them, even if they get a part of their training in special Emergency Training Centres or in Technical Schools. A good deal of the craft of building can be learnt only on the job. If, however, it seems likely to the skilled craftsmen that, a few years after the industry has been expanded by the introduction of these new workers,

¹ See Index.

building activity may be suddenly cut down and large numbers of men thrown out of work, they cannot be expected to receive with enthusiasm the request to train for skilled jobs men who will then become competitors with them for a limited amount of employment. This was the fear which caused so much opposition after 1918 to proposals from Mr. Lloyd George and others for the dilution of building labour, and led the builders to look askance at every idea of pre-fabrication or alternative methods of construction designed to dispense with craft labour. This opposition was withdrawn in 1924, as soon as John Wheatley had shown his sense of realities by approaching the industry with the offer of a 'treaty' based on a long-term building programme. The operatives, as a part of that treaty, readily agreed to the introduction of new workers into their crafts, and took part in their training.

But the Labour Government of 1924 fell, and the treaty which it had made with the building industry was not honoured by its successor. A glance at the chart on page 98 will show how sharply public activity in housing, including assistance to private enterprise as well as local authority building, fell off in 1928—that is, as soon as there had been time for the reversal of policy which followed the defeat of the Labour Government to take effect, and how total house-building declined and remained, right until 1933, at a much lower level than had been reached in 1927. Local authority building, indeed, never was brought back to anything approaching the level reached in 1927-28 as the outcome of the Wheatley Act, though there was a small recovery in 1931-32 as a result of the second Labour Government.

The moral of this story is that a mere promise from a Government which may speedily fall from office is not enough. John Wheatley did all he could in 1924; but he was not in a position to bind his successors in office, and they did not in fact carry on the policy which he had laid down. It may be said that such reversals of policy are part of the system of party government under which we are accustomed to living in time of peace, and that the building workers had no right to complain if a Conservative Government took a different view from the Labour Government with which they had negotiated their treaty, especially as the Conservative Government acted with the sup-

port of a new House of Commons elected by the popular vote. The fact, however, remains that the building workers felt defrauded. They had entered into certain undertakings on the strength of a promise from the Government of the day that a big long-term house-building programme was to be systematically pursued. They had accepted 'dilutees' into their crafts, and had helped to train them. And within a year the Government which had entered into undertakings with them was displaced by another, which repudiated its policy, in deed if not in word.

A mere Government undertaking, then, to embark on a long-term house-building programme is not enough to reassure the operatives, who fear that the rapid expansion of their industry in order to meet immediate needs may be followed by a contraction which will mean, for them, a desperate scramble for work and a great weakening of collective bargaining power. An undertaking given by a Coalition Government, such as is now in office, is, of course, rather different from one given by a party Government in danger of displacement by a rival party. But is it better or worse? The promises of 'Homes for Heroes' in 1918 came from a Coalition; but that did not prevent them from being lopped down a little later by the 'Geddes Axe', even while a number of the politicians who had been party to them were still in office.

What, then, ought to be done to ensure that the long-term housing plans which are being spoken about to-day are not thrown overboard within a few years of the end of the war? One thing that would help would be a solemn declaration by the leaders and the governing authorities of all the parties of an intention to see these plans through, whatever the fortunes of party politics may be. A second would be an embodiment of the main outline of the plan in actual legislation, which would have to be repealed before it could be substantially cut down. Such embodiment would probably involve the setting up of some administrative body distinct from the Government itself to supervise the execution of the plan—presumably some sort of Public House-building or Housing Corporation, with some degree of autonomous power. I shall have to come back to that question in a later chapter¹; for the question of establishing

¹ See Chapter XI.

such a Corporation has many bearings, and will be dealt with best when the future organization of the building industry as a whole comes to be considered. For the moment, the essential point is that there must be guarantees, as firm as they can be made, that the long-term plan of house-building which the Government is promising will in fact be carried through, even if the political or the economic conditions change.

I do not mean by this that the plan ought to be entirely inflexible. It is right and proper to allow for variations in the pace at which it is carried out. But such variations must be made in accordance with definite principles, and must square with sound ideas of public employment policy. It may be appropriate, if the demand for, say, industrial building is very high at a particular time, to slow down house-building in order to release labour for such building; and it may be appropriate to speed up the rate of building either houses or anything else as one of the measures needed to counteract a tendency for the demand for labour to decline. What cannot be right is to do as was done in 1922, in 1925, and yet again in 1931, and to curtail building activity not when labour is scarce, but when it is plentiful. The 'economy' policy which wrecked inter-war housing programmes was entirely foolish and misconceived: we must not, on plea of the need for elasticity, leave the door open for a repetition of that form of folly.

The next lesson that we should learn from our experience after 1918 is that it is indispensable, in embarking on any extensive building policy, to keep the prices of building materials and requisites under tight control and also to keep a tight hold over contract prices. The average price per standard of good building deal (4 inches by 11 inches) was £14·8 in 1913 and nearly £62 in 1920. The average price of English sheet glass (21-oz. thirds) was 3·43d. in 1913 and 9·29d. in 1920. The general index for iron and steel stood at 358 in 1920 (1913=100); and there were much larger increases in the prices of many of the manufactured products which go to the making of a house. John Wheatley attempted in 1924 to pass a law for the regulation of the prices of building requisites, as one element in the general plan for stabilizing building activity at a high level; but the Government fell before his bill could become law, and the incoming

Government simply let it drop. After this war, there is bound to be severe shortage of many essential materials and requisites, at any rate during the earlier stages of the building programme. It will be absolutely necessary to keep a firm control over the factories in which these goods are made, and over the importers who bring some of them in from abroad.

This is not merely a matter of keeping the industries and trades concerned formally under control during the post-war emergency; for control might mean only a licence to the rings and combines which dominate them to act in the Government's name. It is a matter of keeping a constant impartial check upon costs and prices and of compelling each group of producers or traders to justify its prices at the bar of public opinion. It will be necessary, moreover, to provide for an expansion of the output of building supplies far beyond the existing capacity of the industries concerned; and this need will be the greater if there is to be any large amount of pre-fabrication either of temporary houses or of permanent houses and housing components. The obvious course will be to turn over to mass-manufacture of building requisites a number of the war factories which will be no longer needed for war production; and among the suitable factories will be many that have been built by the Government, or with Government money—Royal Ordnance factories directly under Government management, and agency factories owned by the Government but managed for it by private firms. The right policy will be to use a number of these establishments for the production of building supplies, and to employ them at the same time as large-scale laboratories in which new methods can be tried out and a check kept on the costs and prices of private suppliers. With this should go the establishment of a permanent Government organization, parallel to the Department of Scientific and Industrial Research and working in close association with it, for economico-technical research—'consumers' research', it is sometimes called—to inquire into the needs of the consuming public and the best and cheapest ways of meeting them by the proper use and development of the available resources of industry. Finally, behind such an organization there must be effective powers placed somewhere to deal with offenders—to outlaw restrictive and monopolist practices

which hold up production or make things unduly dear, and to work out codes of conduct to which the producing and trading groups will be expected to conform.

The fourth lesson of the inter-war experience is that house-building which is left mainly to private enterprise, with or without subsidies, results in the erection of houses mainly for sale and not for letting, and mainly at prices which those who are in the greatest need of better houses cannot possibly afford to pay. Catering for the housing needs of the main body of weekly wage-workers is not, in general, an attractive proposition for the speculative builder or Estate Company—at any rate as long as there is unsatisfied demand to be met from persons with a higher ability to pay. It is probable that, in 1939, saturation point was being approached in many areas with the supply of the more expensive houses. But the cessation of building during the war, and the changes which are to be expected in the post-war location of industries and population, will have created a new demand of this type; and we may be sure that the speculative builders will go out to build, and most of the Building Societies and other financial agencies to finance, these more expensive types of houses in preference to types for which there is a much more urgent need. It seems all too likely that, in relation to house-building, the old battle between the advocates of public and private enterprise will be renewed, and that it will depend on ‘politics’ whether the main emphasis is put on the one or the other. What must be realized in connection with this controversy is that putting the emphasis on private enterprise building means in practice putting it on the side of houses for the relatively well-to-do, whereas emphasis on public building means a preference for supplying the much more pressing needs of the relatively poor.

This question of public *versus* private enterprise in house-provision must not be confused with the quite different question of the methods by which the work is to be done. Public building is entirely consistent with the employment of private firms to do the work: it means only that the house is built to public order and belongs, when it has been built, to a public body. Public authorities can, of course, get their building done by the method of ‘direct labour’—that is, by cutting out the private

contractor and setting up their own building departments. But this is a quite distinct question. In arguing for public as against private enterprise as the method of getting first things done first—of meeting the most urgent housing needs at the earliest possible stage in the execution of the post-war programme—I am not arguing either for or against 'direct labour'. What I am saying is that the houses should for the most part be built to public order and should be publicly owned.

The final lesson of the inter-war period is that housing is a tricky business, and demands much better organization than exists at present either on the side of the Government or in the industry itself. It is most unsatisfactory that housing should be merely one of the secondary responsibilities of a Ministry concerned mainly with questions of public health and local government finance—not because there is any absence of intimate connections between health and housing, or between housing and the finance of the local authorities through which housing policy is largely implemented, but because housing is a big enough matter to form the point of focus of a separate Ministry. In my view, the responsibility for housing policy ought to be combined with the responsibility for town and country planning, and it was a great mistake, when the one was removed from the Ministry of Health to a new department, not to remove the other as well. Housing and town planning ought to be so intimately bound up together as to make a division of responsibility impossible. It will prove so, I fancy, in the long run; but for the time being the Government has elected to divide the indivisible, and presumably no change is likely to be made except by a different Government.

Indeed, we have now, not only the division between the Ministry of Health, as the department responsible for housing, and the Ministry of Town and Country Planning, but also the division, in the field of housing, between the Ministry of Health and the Ministry of Works and Buildings. At present, it appears, the latter Ministry is in charge of the plans for temporary housing, whereas permanent housing is a matter for the Ministry of Health. This is presumably because the Government proposes itself to erect and own the temporary houses, whereas the permanent houses will be owned either by the local authori-

ties or by private persons. The Ministry of Works and Buildings is the old Office of Works writ large: it is the Government's own works department, expanded into a Ministry which has been mainly responsible for the supervision of war-time building and civil engineering contracts, as well as for the maintenance of Government property. The division is thus in a sense logical, on the assumption that the Government does not intend itself to enter the field of permanent housing, except as a supplier of financial aid to local authorities or to other agencies which will become the owners of the houses when they are built. But it is nevertheless awkward, because it involves a division of the responsibility for the research and development work which needs to be undertaken in connection with both permanent and temporary housing projects. The Ministry of Works has, and the Ministry of Health has not, close contacts with the building industry, and is obviously in a better position to explore the possibilities of standardization, pre-fabrication, mass-production, and similar matters. In practice the two departments work together in all these fields; and probably this is as good an arrangement as can be made under present conditions. There is, however, much to be said for the view that, as soon as the special war-time responsibilities of the Ministry of Works and Buildings come to an end, it would be best merged with the Housing Section of the Ministry of Health and the whole of the Ministry of Town and Country Planning into a single comprehensive Ministry of Housing and Planning.

Some such solution seems actually to have been envisaged at an earlier stage. When the Office of Works was broadened out into the Ministry of Works and Buildings, with Lord Reith as Minister, Lord Reith was entrusted with the general task of supervising 'physical planning'; and later on the name of the department was changed for a time to 'Ministry of Works and Planning', and the town and country planning powers formerly vested in the Ministry of Health were transferred to it. It seems probable that the original intention was to transfer housing as well, but that the Ministry of Health put up so much opposition as to lead to the dropping of the proposal. It was, however, clearly absurd to put building and town and country planning under one department, and housing under another; and pre-

sently the Ministry of Town and Country Planning was sent off on its own, with far too few powers and duties to make an effective department—for the location of industry was left with the Board of Trade, and Scotland was left to control its own town and country planning through the Scottish Office. The result is an anomalous patchwork of Ministries, arranged not on any principle of logic or convenience, but as the result of conflicting pulls between existing departments.¹ Such a set-up is not likely to be very effective in handling the exceedingly complicated problems which are bound to arise; and the greatest danger of all is that under it there may be no Minister at all whose task it is to consider housing and building policy as a whole and to relate them rightly to the essential problems of planning and re-location of industries and population. Yet building occupies, from both a social and an economic point of view, a key position in the field of reconstruction. According as we build wisely or unwisely, we shall remake well or ill the ground-plan of British industry and of the British pattern of living in the post-war world. That, surely, should be the primary responsibility of some one Minister: it should not be split up in such a way that half-a-dozen Ministers will be able to blame one another if things go wrong.

¹ See footnote to page 62.

CHAPTER V

LABOUR SUPPLY AND UTILIZATION

I

LET us now look at what happened to the British building industry between the wars from another point of view—that of the labour employed in it, or available for employment.

Between the end of 1918 and the summer of 1939 the total number of insured workers in the building and public works contracting industries in Great Britain and Northern Ireland grew from a little over half a million to over 1,400,000. This growth, of course, includes the influx of men returning from the forces, who had been previously employed in these industries. This cannot be accurately estimated; but by the end of 1919 the number of insured workers had risen to over 750,000, and by July 1920 to about 900,000. Thereafter came a fall, to 844,000 in 1923; but from that point the rise was continuous, though the pace varied from year to year. By 1927 the labour force was in excess of a million. It reached 1,250,000 early in 1935, and well over 1,400,000 in 1939.

In the foregoing paragraph, the figures for building and public works have been given together, because they cannot be wholly disentangled for the period just after 1918. For the building industry alone, the expansion was from about 620,000 in July 1919, and about 750,000 in July 1920, to 1,041,000 in 1939. There was a fall from 790,000 in 1921 to 716,000 in 1923—due to the decline in building which followed the swing of the Geddes Axe. Thereafter the numbers rose continuously to 858,000 in 1931. There was a small fall in 1932, at the bottom of the world depression, but the increase was soon resumed, and the total reached 1,050,000 in 1938.

TABLE II
INSURED WORKERS IN THE BUILDING AND PUBLIC WORKS
INDUSTRIES, 1918-1939
(In thousands)

	<i>Building</i>	<i>Public Works</i>	<i>Total</i>
U.K.			
A. 1918-1920—			
September 1918 . . .	—	—	583·7
January 1919 . . .	—	—	554·8
July 1919 . . .	651·9	114·5	766·4
January 1920 . . .	—	—	799·0
July 1920 . . .	794·6	144·3	938·9
G.B. and N. Ireland.			
B. 1921-1927—			
July 1921 . . .	790·4	117·6	908·0
July 1922 . . .	768·8	112·4	881·2
July 1923 . . .	716·0	127·9	843·9
July 1924 . . .	726·3	133·8	860·1
July 1925 . . .	758·9	150·1	909·0
July 1926 . . .	804·6	166·4	971·0
July 1927 . . .	847·9	169·3	1,017·2
G.B. and N. Ireland.			
C. 1927-1939 (16-64 only)—			
July 1927 . . .	807·2	162·4	969·6
July 1928 . . .	816·6	160·0	976·6
July 1929 . . .	826·0	164·4	990·4
July 1930 . . .	832·3	186·3	1,018·5
July 1931 . . .	858·2	270·6	1,128·8
July 1932 . . .	856·9	290·4	1,147·3
July 1933 . . .	883·8	277·6	1,161·4
July 1934 . . .	928·2	271·7	1,199·9
July 1935 . . .	976·8	277·4	1,254·2
July 1936 . . .	1,019·7	289·3	1,309·0
July 1937 . . .	1,035·3	294·1	1,329·4
July 1938 . . .	1,050·1	328·0	1,378·1
July 1939 . . .	1,041·5	363·6	1,405·1

For public works contracting, the rate of increase over the whole period was even greater, from about 100,000 in July 1919, and 130,000 in July 1920, to over 360,000 in 1939.¹ Unlike the building figures, those for public works contracting tend to rise sharply in periods of depression, owing to the transference of unemployed workers from other industries to public works schemes. It seems indeed to have been a definite policy of the Employment Exchanges to keep on pouring fresh labour from the depressed areas into civil engineering, even when the rate of unemployment in civil engineering work was already abnormally high. Thus the number of insured workers in public works contracting rose suddenly from 186,000 in 1930 to 271,000 in 1931 and 290,000 in 1932. But there was a further sharp rise in 1935 and the following years, from 272,000 in 1934 to 364,000 in 1939—the latter part of this increase being undoubtedly affected by rearmament. These figures are only meant as approximations; and accordingly changes in classification have been ignored. Taking account of them would not affect the general picture. The yearly figures, as far as they are available, are set out in Table II (see p. 111), from which it can be seen why it is impossible to present an exact comparison covering the entire period.

It will be seen from these figures that between July 1919 and July 1921 the number of building workers increased by about 170,000. Between July 1923 and July 1927 the expansion was 132,000, or at the rate of 33,000 a year. This shows the combined effects of the Chamberlain and Wheatley Housing Acts. During the next four years, from 1927 to 1931, the growth was 51,000, or 13,000 a year. In 1932 there was a small fall; but

¹ I append for convenience Mr. Ian Bowen's calculation (from *Oxford Economic Papers*, February 1940) of the value of building output in 1938 under five heads, expressed as a percentage of total estimated output:

	£ millions	Percentage distribution
Dwellings	136	40.0
Factories	25	7.5
Other Private Buildings	41	12.0
Government Buildings	27	8.0
Repairs and Maintenance	110	32.5
	<hr/> 339	<hr/> 100

thereafter up to 1936 there was an expansion of 163,000 at an average rate of over 40,000 a year. From 1936 to 1938 the addition to the insured labour force was 30,000, or 15,000 a year; and thereafter came a small fall in 1939. These figures clearly reflect the great housing boom of the middle 'thirties.

Thus, after the last war it took about seventeen years to add half-a-million workers to the building industry, and the total addition in 1927-28, when the public housing programme was at its peak, was only about 300,000.

It seems necessary to contemplate both a much greater and a much more rapid expansion at the end of the present war. How large this expansion will need to be depends on major issues of social and economic policy; but without prejudging these, it can be said that there are several reasons for anticipating a much greater need for building labour than was actually met in the years after 1918.

The most obvious, but by no means the most important, new factor is bomb-damage, the extent of which cannot be fully anticipated at present. It seems certain that this will continue to be very unequal in different areas: so that, apart from changes in the location of industry and population, it will create large demands for labour in some places and quite small demands in others. The character of the demand to which it gives rise will also vary according to the policy followed in physical reconstruction. If demolition, rather than repair, of damaged dwellings is adopted as a widespread policy, the demand will approximate in character to that called for by new construction, whereas a policy of extensive repair applied, in order to relieve the immediate pressure, to houses which are already well on the way to obsolescence, will require the labour of the various building trades in different proportions. Again, if a large-scale policy of purely temporary construction is adopted as a short-term measure, this will affect greatly the relative demand for different kinds of building labour.

The second factor is indirectly a result of bomb-damage. The destruction of important urban areas presents a great opportunity for large-scale town planning and re-development; and this is likely to create a demand for new building over and above the replacement, building for building, of the structures which will

have been destroyed. Re-location and development arising from this cause will require the provision of additional amenities and utilities, especially where they take shape in the creation of new or satellite towns. This factor shades off into the wider question of general town-planning policy; but it is bound to operate in some degree whatever general policy is adopted.

Thirdly, the industrial changes following upon this war seem likely to be considerably greater, or at any rate more immediate, than those after 1918. There has already been much more disturbance of the pre-war productive system, and of overseas trade; and the permanent change in markets is likely to be very considerable. Moreover, the processes of concentration in the non-essential trades and of conversion of factories to war use will probably lead to big permanent changes in many industries, necessitating the building of new factories able to take advantage of the latest improvements in technique, and probably also to large changes in industrial location, with an accompanying demand for housing and other construction in the areas to which industry is attracted.

This conclusion is admittedly speculative; but it is more likely than not to be true. The processes of concentration, as practised under war conditions, have not resulted in the selection of the most efficient factories for continued operation in the less essential trades, but only in the selection of the more efficient factories that are left after conversion to other purposes of the factories needed for the war effort. The effect of concentration, even if it results in permanent amalgamations of productive units, may therefore be to cause the amalgamated firms not to carry on post-war production in the factories which have been made 'nuclei' under war conditions, but to desire to erect new factories planned for optimum output under the conditions of the post-war market. This is apart from the effect which changes in the nature of the market or in transport facilities, or in the technique of production and in the materials used, may have on the optimum location of the 'concentrated' industries after the war.

There will be in addition the task of re-converting to peacetime uses premises which have been adapted for war purposes. This has been promised in many cases where factories set free

by concentration and other buildings have been taken over and converted for war production or storage or military accommodation; and often considerable expenditure on re-conversion and re-installation of plant will be required. Side by side with this re-conversion there will also be the conversion of new factories built for war purposes (e.g. 'shadow' factories) into peace-time factories or training establishments.

Fourthly, there is the factor of evacuation. Many firms which have moved their establishments out of danger zones are now accommodated in inconvenient premises. It is impossible to predict how many such firms will decide to remain in the areas to which they have moved; but where they do remain there will certainly be some *net* addition to the demand for new industrial buildings.

Fifthly, there is certain to be a large demand for school-building. This follows directly from the provisions of the Education Act, which will require both a large addition to total school and college accommodation and very extensive rebuilding of unsatisfactory premises at every stage of the educational highway.

As for the 'statistical' demand for houses—that is, the number of new dwellings needed, apart from bomb-damage or changes in location, to provide each family with a separate dwelling—this may well be a good deal smaller than it was in 1918, owing to the high degree of housing activity in the 1930's. According to the formula used by Mr. H. W. Robinson in *The Economics of Building* (1939), the purely statistical 'building need' in 1911—that is, the 'need' based exclusively on global estimates of the composition and size of the population—was for 455,000 houses, but in 1938 only for 300,000. Moreover, if building of houses had continued into 1942 at the level actually reached in 1938, the entire 'building need' in this sense would have been met, and there would have been no statistical 'need' for new houses except for replacements and for the accommodation of additional families. In other words, there would have been no *arrears* still to be overtaken. A house, of a sort, would have been available *somewhere* for every family.

This is, of course, a highly abstract statement of the position. It ignores the fact that houses which exist may not be in the

places where they are needed, or may not be of the types that are needed, or of a standard which can now be regarded as satisfying minimum requirements. It is based on a highly artificial simplification of the problem, which makes 'building need' a mere statistical derivative from the number of 'families' and the number of 'dwellings' recorded in the official returns. Nevertheless, it does furnish a very broad indication of the magnitude of the demand for houses, or rather of its relative intensity at different times, on the assumption that no great changes are occurring in the location of industry and population. It is reasonable to conclude that the demand for houses after this war will arise even more from such factors as bomb-damage, changes in location, and the adoption of new housing standards than from the absolute shortage of accommodation of *any sort* due to a failure to meet current housing demands in the period before the war.

There remains, of course, the factor of war arrears. House-building is now suspended, apart from the special case of building in the neighbourhood of war factories, aerodromes, and other centres of war activity; and much of the building done in such areas is of doubtful post-war value for housing purposes. Thus, hostels built for munition workers may prove unsuitable for post-war housing of the people: and houses built in the neighbourhood of aerodromes or filling factories may be surplus to post-war needs in these particular places. It is therefore reasonable to ignore the greater part of war-time house-building in assessing post-war needs. This conclusion might have been modified if it had been found possible to conduct such war-time building operations more with an eye to post-war needs than has actually been the case.

The rate of house-building from 1935 to 1939 was in excess of 350,000 houses a year. At this rate, as we have seen, the statistical 'building need' for making up arrears, as distinct from improving standards, would have been met by the end of 1941 or early in 1942. If we ignore the houses built since 1939, this means that arrears of about 700,000 houses had accumulated by that time, but that thereafter the purely statistical rate of accumulation has been much slower. Actually, the accumulation of arrears may have continued at a high rate, on account of the

very large number of obsolete houses still counted as habitable in 1939. Moreover, if war-time changes in the location of industry produce lasting effects on the demand for houses in different areas, the purely statistical measurement of housing 'needs' may prove less realistic than ever; but this latter is a separate question, of which account has been taken already in an earlier paragraph. The factor of arrears, pure and simple, can therefore be taken at about 700,000 up to the end of 1941. Thereafter, the main factor is not the sheer lack of houses of any sort, but the retention in use after 1941 of houses which ought to have been demolished. In view of the large number of such houses, I think it is reasonable to reckon the factor of arrears at 350,000 a year for the period after 1941 up to the time when house-building can be resumed.

Industrial and other non-residential building raises much more difficult questions, as there can be no statistical computation of the need for non-residential building on at all the same lines as the computation of the need for housing accommodation. Certain kinds of non-residential building are indeed closely linked to housing activity—for example, shops, public houses, cinemas, churches, and amenities and utilities in general. But the demand for buildings of these types depends not only on the amount of house-building, but also on the location of the new houses and on the policy adopted in equipping new suburbs or urban areas with independent utilities and amenities of their own.

The demand for industrial buildings is even less amenable to statistical treatment. In the past it has fluctuated largely with the course of the trade cycle, periods of high business activity being also periods of active capital investment and industrial construction. But it would be highly unsafe to base any conclusions about the post-war demand for industrial building on conclusions derived from the observation of past cyclical movements. We do not know to what extent the trade cycle will be allowed to continue to operate in the post-war period: indeed, the Government has promised in general terms to follow a policy designed to eliminate its effects by keeping the total volume of employment steady at a high level. Moreover, apart from this, the demand for industrial building will be greatly affected by other factors. It will depend both on the extent

to which British industry changes its character and its technical methods in the post-war period and on the degree to which war factories are found to be adaptable to peace-time uses. These factors in turn depend on the extent to which a high level of export of capital goods is maintained after the war, so as to keep production in the heavy industries at a high level, and on the policy followed by British business in adapting itself to the market requirements of the post-war world. Nor can banking policy be ignored in this connection; for a deflationary policy in the supply of credit could obviously damp down capital investment and might adversely affect the demand for industrial building to an almost unlimited extent.

The conclusion is that it is quite impossible, apart from considerations of policy, to make any prediction about the total demand for building labour in the period after the war. The magnitude of this demand must depend upon policy, both in relation to housing and in relation to industrial and other non-residential building. No more is possible at present than to enumerate the major points of policy that will have to be decided before any prediction can be made as to the size to which the building industry will need to be expanded after the war.

Among these points are the following:—

(1) Is the repair of war damage to be limited to replacement of destroyed buildings, with repair of as many damaged buildings as can be made fit for use, or is it to extend to a major reconstruction of the affected areas, involving the demolition of many buildings which are individually capable of repair?

(2) Is there to be a policy of providing temporary accommodation, pending more thorough reconstruction, or are we to proceed at once to permanent re-building, save in quite exceptional instances?

(3) Is re-building to take place on or near the old sites, or is there to be an extensive policy of re-location of blitzed and evacuated populations?

(4) Are measures to be taken to control the future location of industry, or is this to be left, as in the past, to private initiative and decision?

(5) Are the standards of post-war housing to be approximately the same as the pre-war standards, or higher?

(6) Is there to be an extensive use of new materials and processes, e.g. pre-fabrication on engineering lines, so as to affect considerably the quantity of labour needed (a) on the site and (b) in the factories for the execution of any given programme?

(7) Is the practice of building houses largely for an imaginary 'average family' to be continued; or is more attempt to be made to build houses of different types and sizes, suitable for occupation by families of different sizes and levels of income? (N.B.—The latter policy of course implies an easier mobility from dwelling to dwelling, as the composition of the household or the level of income changes.)

(8) What standards are to be aimed at in the provision of amenities and utilities both for re-housed populations and in continuing centres of population?

(9) Is Government policy to be firmly based on the idea of securing 'full employment', or is deflation to be allowed to wreck projects of reconstruction, as it did after the last war?

(10) Is a policy of overseas investment to be actively pursued, so as to provide continued employment for the heavy industries? (It should be noted that the extent of post-war armament activity is also highly relevant at this point.)

(11) Is an active policy both of education and of other forms of social development to be followed, so as to require an extensive programme of building not only for schools but also for community centres and other public buildings?

(12) Will steps be taken to counteract the declining birth-rate by offering inducements to establish more 'families' and so to increase the demand for separate dwellings?

(13) Will such plans as are made for post-war building be aimed at the speediest possible execution of a complete programme, or will they be spread over a considerable period of years at a lower annual rate?

(14) Will effective measures be taken to control contract prices for building and the supply and price of essential building requisites, or will these be left mainly to the 'higgling of the market'?

These fourteen questions indicate the degree to which post-war building demand must depend on matters of policy which

are still unsettled. Until some of them at least are decided, estimation of the future level of building activity can be hardly more than guess-work. It is, however, necessary to make some assumptions if the problem of equipping the building industry is to be taken in hand in time. I venture to assume that the basic problem will be that of getting into the building industry as many skilled, or fairly skilled, workers as can be made available by extensive measures of training, and that the actual volume of post-war building activity will depend at least as much on the success achieved in expanding the skilled labour force as on any other factor. It is much more likely that ambitious programmes of reconstruction will be held up for lack of the requisite labour than that the supply of skilled labour will be in excess of the demand. The practical moral is that every possible effort must be made to expand the skilled labour supply, in order to avoid 'bottle-necks' in trades which it is difficult to learn quickly. The experience after the last war suggests that this is the crux of the problem; and the exceedingly slow rate of expansion then achieved suggests that much more drastic measures than were then applied will be needed if even the minimum policies evolved as answers to the questions set out are to be effectively applied.

II

Let us now look at the position of the individual trades in the building industry in the same way as we have looked already at the total labour supply of the industry. Table III sets out, as far as the figures are available, the development of the insured labour supply from 1914. Up to 1921 these figures are for the United Kingdom, including Ireland, and cover Construction of Works as well as Building. From 1923 they are for Great Britain and Northern Ireland only; and the figures for Building are given separately from those for Public Works Contracting, the latter not being broken up into trades. Accordingly the crude figures cannot be compared, save in very general terms. In Table IV the totals for the six principal building crafts are expressed in terms of the percentage distribution of the totals for the six crafts among the several crafts.

TABLE III

BUILDING WORKERS. NUMBERS INSURED BY TRADES AT CERTAIN DATES

(Thousands)

	<i>July 1914</i> <i>B + C</i> <i>(U.K.)</i>	<i>Jan. 1919</i> <i>B + C</i> <i>(U.K.)</i>	<i>July 1920</i> <i>B + C</i> <i>(U.K.)</i>	<i>July 1923</i> <i>B</i> <i>(G.B.</i> <i>and N.I.)</i>	<i>July 1930</i> <i>B</i> <i>(G.B.</i> <i>and N.I.)</i>	<i>July 1938</i> <i>B</i> <i>(G.B.</i> <i>and N.I.)</i>
Carpenters . .	148.8	92.0	143.4	125.0	125.7	153.2
Bricklayers . .	78.4	40.1	64.6	57.2	73.8	110.6
Masons . .	46.7	19.0	29.1	22.3	21.2	22.8
Plasterers . .	24.0	9.8	16.8	16.1	24.3	38.2
Painters . .	149.7	67.6	121.9	106.9	105.7	143.4
Plumbers . .	41.7	25.2	43.3	34.4	32.8	45.2
Slaters and Tilers .	7.9	—	—	5.2	6.0	9.3
Builders' Labourers	301.1	187.5	349.6	254.5	240.7	305.3
Navvies, etc. .	123.4	84.4	123.0	—	—	—
Other Occupations	35.3	29.2	47.2	95.6	202.1	120.3
Public Works Con- tracting.	—	—	—	127.8	186.3	328.0

* Included under other occupations.

TABLE IV

BUILDING WORKERS. PERCENTAGE DISTRIBUTION IN THE SIX
PRINCIPAL CRAFTS

	<i>July 1914</i> <i>B + C</i> <i>(U.K.)</i>	<i>Jan. 1919</i> <i>B + C</i> <i>(U.K.)</i>	<i>July 1920</i> <i>B + C</i> <i>(U.K.)</i>	<i>July 1923</i> <i>B</i> <i>(G.B.</i> <i>and N.I.)</i>	<i>July 1930</i> <i>B</i> <i>(G.B.</i> <i>and N.I.)</i>	<i>July 1938</i> <i>B</i> <i>(G.B.</i> <i>and N.I.)</i>
Carpenters . .	30.4	36.2	34.2	34.5	32.8	29.8
Bricklayers . .	16.1	15.8	15.4	15.8	19.2	21.6
Masons . .	9.5	7.5	6.9	6.2	5.5	4.4
Plasterers . .	4.9	3.9	4.0	4.4	6.3	7.5
Painters . .	30.6	26.6	29.1	29.5	27.6	27.9
Plumbers . .	8.5	10.0	10.3	9.5	8.6	8.8

This Table brings out certain remarkable changes in recent years in the composition of the skilled labour force in the building industry. Bricklayers have risen sharply in relative numbers since 1923. This increase is partly offset by a decline in the proportion of masons: but plasterers have also increased very rapidly in relative numbers. These changes clearly reflect the greater importance of house-building in the total activity of the industry, whereas the decline in the proportion of carpenters is probably a consequence of changing methods of construction. The importance of the figures lies in bringing out the essentially simple point that the relative demand for different types of building labour will depend not only on the total amount of building, but also on its nature. Industrial and other forms of non-residential building call for a different composition of the labour force from cottage building; and the character of the demand for residential purposes is affected both by methods of construction and materials used and by the proportions of cottages and flats included in the total programme.

In Table V the total numbers employed in the six crafts are expressed as a percentage of the total numbers in the industry. Up to 1920 the figures include Public Works Construction as well as buildings, and are therefore not fully comparable with the later figures. But from 1923 they relate to building only. What is notable in this case is the fall in the proportion of craftsmen between 1923 and 1930, despite an absolute rise in their number, followed by a recovery due to the greater activity of house-building between 1930 and 1938. On the face of the figures, the changes in the relative proportions of labourers and 'other occupations' is still more remarkable; but this must be accounted for by the inclusion of navvies in the latter category in 1930, whereas they are given separately in 1938.

These figures show on the whole a high degree of stability in the proportions of skilled and unskilled workers, though as we have seen there has been substantial redistribution between the crafts. The six principal crafts account for nearly half the total number of workers in the building industry, and the builders' labourers, as distinct from the navvies, for another

29 per cent. Navvies are a little less than 10 per cent., and the residue is made up mainly of skilled workers belonging to other crafts, including slaters and tilers. Well over half the total personnel consists of skilled craftsmen.

It is not possible to present any analysis of these workers by age-groups. But in 1936 the total number of insured workers

TABLE V

BUILDING WORKERS. PERCENTAGE DISTRIBUTION BY GROUPS OF OCCUPATIONS

	<i>Proportion in six crafts to Total</i>	<i>Proportion of Labourers to Total</i>	<i>Proportion of Navvies to Total</i>	<i>Proportion in other occupations to Total</i>
<i>A.—Building and Construc- tion of Works: U.K.</i>				
1914	51.1	31.5	12.9	4.5
1919	45.75	33.8	15.2	5.25
1920	44.6	37.2	13.1	5.0
<i>B.—Building only: G.B. and Northern Ireland.</i>				
1923	50.5	(35.5)*		14.0
1930	46.1	28.9	(25.0)†	
1938	48.9	29.1	9.7	12.3

* Labourers and Navvies.

† Including Navvies.

in the building industry between the ages of 14 and 16 was about 32,000; and it is unlikely that there was any large change before the war in the size of this group. In Public Works Contracting the number of workers between 14 and 16 was less than 2,000 in 1936.

Let us now, for purposes of illustration, take an entirely imaginary figure, and assume that the building industry needs to be scaled up to a total working force of two million. If we take the craftsmen as numbering half the total personnel of the building industry, an expansion of the total insured labour force to this level would require 1,000,000 craftsmen, or an addition

of approximately 480,000 skilled workers to the numbers in the industry before the war. On the assumption that this expansion would need to be in proportion to the pre-war numbers in the various trades, the following would be the requirements for different types of workers.

TABLE VI

MINIMUM ADDITION TO INSURED SKILLED LABOUR FORCE NEEDED TO
RAISE THE BUILDING INDUSTRY TO A TOTAL STRENGTH OF TWO
MILLION

<i>Craft</i>	<i>Number Insured in 1938</i>	<i>Required addition</i>	<i>Total contingent in an industry raised to two million</i>
	000's	000's	000's
Carpenters . . .	153·2	140	293
Bricklayers . . .	110·6	101	212
Masons	22·8	21	44
Slaters and Tilers . . .	9·3	8·5	18
Plasterers	38·2	35	73
Painters	143·4	131	273
Plumbers	45·2	41	86
Total	522·8	477·5	1,000

The actual requirements might diverge from these, according to the specific character of post-war building; but the figures will serve as an indication of what would be required. Corresponding increases would of course be called for in the numbers of labourers and other workers.

The raising of the total insured building labour force to 2,000,000 would thus involve the training of 140,000 carpenters, 131,000 painters, 101,000 bricklayers, and so on, even on the assumption that the entire body of skilled men belonging to the building industry were able to return to it after the war. As

there is bound to be in practice a substantial wastage, the need for training would be proportionately greater than the figures in the Table suggest.

In the foregoing account of the labour force in the industry no account has been taken of the number of small working employers and independent craftsmen. The Census of 1931 shows, for Great Britain, a total of 1,110,933 persons occupied in the building, contracting and decorating industries. Of these, 994,685 were engaged as operatives or out of work, leaving a residue of 116,248, which can be regarded as representing roughly the numbers of managerial workers, including employers, and of men working on their own account. The somewhat different occupational classification of the same Census gives the total occupied in building, contracting and decorating occupations as 1,079,931, of whom 974,952 were operatives or out of work, leaving 104,979, of whom 64,624 were managerial (including employers) and 40,355 were working on their own account.

It is exceptionally difficult in the building trade to separate employers and managers from men working on their own account; but this total of not more than 116,248 assigned to the two groups certainly understates the numbers, as a great many small firms, such as ironmongers, who undertake some building or decorating work, are undoubtedly entered in the Census under other heads. There was probably after 1931 a rapid growth in the number of small building and decorating firms, and a better idea of the total number of such firms and of the numbers of workers employed by them should be obtainable from the registration carried out during the war by the Ministry of Works and Buildings.

The unpublished Tables of the Census of Production of 1935 cannot be used for estimating this growth, as by no means all the smaller building firms made returns for the purposes of the Census. It is, however, worthy of note that, whereas there was between 1930 and 1935 only a small increase in the number of firms employing on the average more than ten workers, the number of returns from the smaller firms rose from 40,078 in 1930 to 64,028 in 1935, and the numbers of employed by these firms from 155,844 to 243,983. This seems clearly to indicate

a very rapid rate of increase among the very small building firms, which by 1939 probably numbered in all well over 100,000.

TABLE VII
CENSUS OF PRODUCTION, 1935
BUILDING AND CONTRACTING TRADES

	<i>Number of Firms</i>	<i>Average Numbers Employed</i>	<i>Employed Workers under 18</i>	<i>Percentage under 18</i>
<i>A.</i> —Firms employing on the average more than 10 workers.	8,919	502,278	33,976	6.75
<i>B.</i> —Such firms employing on the average not more than 10 workers as made returns.	64,028	243,983	not available.	not available.

Of the 502,278 under *A*, 461,759 were operatives, and 40,519 administrative, technical, and clerical staff.

No details are given of the size of the very small firms, beyond the fact that the average number of employees per employer was somewhere between 3 and 4. For the others, the particulars are set out in Table VIII. It will be observed that fewer than 1,000 of the total number of firms had more than 100 employees, only 363 over 200, and only 78 over 500.

For the firms employing more than 10 workers, particulars are given separating new construction from repairs and maintenance of buildings, and also work on highways and sub-contract work, and shop and office fitting. This shows an average of 331,918 men on new building construction, 62,689 on repair and maintenance of buildings, 12,374 on highways, 36,149 on sub-contract work, and 11,707 on shop and office fitting. These figures obviously underestimate repairs, which are carried out largely by the small firms, and highways, which are probably represented largely in the sub-contract total.

The importance of the small firms of builders and decorators lies, from the standpoint of this chapter, in the fact that they employ considerable numbers of 'handymen' not classified as

TABLE VIII
CENSUS OF PRODUCTION, 1935
SIZE OF BUILDING AND CONTRACTING FIRMS

<i>Average Numbers Employed</i>	<i>No. of Firms</i>	<i>No. of Employees</i>
10 or less (firms making returns only)	64,028	243,983
11 to 24	3,626	63,647
25 to 49	2,650	90,774
50 to 99	1,442	98,527
100 to 199	583	79,670
200 to 299	179	43,607
300 to 399	72	25,134
400 to 499	34	14,575
500 to 749	36	21,176
750 to 999	11	9,618
1,000 to 1,499	16	19,504
1,500 to 1,999	7	12,470
2,000 to 2,499	4	8,997
2,500 and over	4	14,579

skilled workers in any craft, but having in practice a wide range of semi-skill in tackling a great variety of jobs. The 'apprenticeship' served by a youth who enters and remains in the service of a small all-round jobbing builder or decorator is in effect a quite different sort of training from that which is given in the larger firms, where each man is specialized to a particular craft. This 'handyman' training is entirely unrecognized, and does not fit into the Trade Union categories, nor into the collective agreements governing conditions in the industry. In effect, these small jobbing firms are a class of business which stands by itself, and demands separate consideration in relation to the post-

war problems of labour supply. It will be of special importance in the post-war years on account of the arrears of repair work which will have accumulated. More is said on this point in a later chapter.

To a certain extent, conditions of a similar sort exist among the small country building firms. These in fact have a wider jobbing range than most of the small urban decorators, and their employees often get a still more diversified 'handyman' training. It is a major question of policy how far these types of 'handymen' ought to be recognized and provided for as a distinct group of building workers, and how far attempts ought to be made to regularize their training, and to provide for the absorption into this group of a substantial number of ex-soldiers and airmen who have been employed on maintenance and similar jobs in the armed forces during the war.

III

We have seen that the number of insured workers in the building industry in 1938 was just over 1,050,000, and that a further 328,000 insured workers were recorded by the Ministry of Labour as engaged in Public Works Contracting, which is broadly equivalent to Civil Engineering in most of its forms. We get a very different picture when we turn from the numbers insured—that is, looking for work—to the numbers actually in employment at any one time. In the accompanying Charts and Tables I have set out the position as it existed in this respect between 1928 and 1936—that is, up to the time at which it could have been affected by the early phases of rearmament. The situation thus revealed is highly anomalous. Building and Civil Engineering were both prosperous industries, which were increasing their output and the number of workers whom they employed. Yet they both showed a regular excess of unemployment over the general average of all industries, including those which were exceptionally depressed. It is true that in one year only—1930—average unemployment in the building industry, measured as a percentage of the number of insured workers, was the same as the average for all industries covered by unemployment insurance; but in every other year, despite

TABLE IX

UNEMPLOYMENT IN THE BUILDING AND CIVIL ENGINEERING INDUSTRIES, 1928-1938

		Quarterly Figures. Per cent. of Insured Workers					Deviation from Average for All Industries				
		March	June	September	December	Average of the Four Quarters	March	June	September	December	Year
BUILDING	1928	11.3	10.0	11.6	15.2	12.0	+ 1.8	- 0.7	+ 0.3	+ 4.1	+ 1.4
	1929	12.8	8.5	10.6	16.9	12.2	+ 2.8	- 1.1	+ 0.7	+ 5.9	+ 1.1
	1930	16.0	12.7	15.5	22.7	16.7	+ 2.3	- 2.7	- 2.1	+ 2.8	—
	1931	22.5	18.1	21.0	28.6	22.5	+ 1.5	- 3.1	- 1.4	+ 7.9	+ 1.2
	1932	29.0	26.1	28.8	32.1	26.5	+ 8.2	+ 3.9	+ 6.0	+ 10.5	+ 4.5
	1933	27.2	19.9	19.7	25.9	23.2	+ 5.3	+ 0.5	+ 1.3	+ 8.4	+ 3.9
	1934	20.3	14.9	16.8	21.0	18.2	+ 3.1	- 1.5	+ 0.8	+ 5.0	+ 1.8
	1935	17.3	13.6	14.7	18.2	16.0	+ 0.9	- 1.8	- 0.2	+ 4.1	+ 0.8
	1936	14.8	10.7	12.1	17.7	13.8	+ 0.6	- 2.1	—	+ 5.5	+ 1.0
	1937	16.3	10.8	10.9	15.4	13.4	+ 4.4	+ 0.4	+ 1.0	+ 4.6	+ 2.6
1938	16.4	12.0	13.3	16.9	14.6	+ 3.9	- 0.7	+ 0.5	+ 4.3	+ 1.9	
1939	19.5	12.2	10.0	14.0	13.9	+ 6.5	+ 1.8	+ 1.2	+ 4.8	+ 3.6	
CIVIL ENGINEERING		(Public Works Contracting)									
1928	19.4	17.6	20.3	24.3	20.4	+ 9.9	+ 6.9	+ 9.0	+ 13.2	+ 9.6	
1929	23.1	18.1	20.5	25.3	21.8	+ 13.1	+ 8.5	+ 10.6	+ 14.3	+ 11.7	
1930	27.7	22.0	26.1	31.1	26.7	+ 14.0	+ 6.6	+ 8.5	+ 11.2	+ 10.1	
1931	32.2	21.9	31.0	35.6	30.2	+ 11.2	+ 0.7	+ 8.6	+ 14.9	+ 8.9	
1932	37.6	35.9	41.9	44.2	37.4	+ 17.4	+ 13.7	+ 19.1	+ 22.6	+ 15.4	
1933	43.7	43.1	46.2	48.4	45.3	+ 21.8	+ 23.7	+ 27.6	+ 30.9	+ 26.0	
1934	45.9	43.6	45.6	47.4	45.6	+ 28.7	+ 27.2	+ 29.6	+ 31.4	+ 29.2	
1935	46.9	43.0	46.5	47.6	46.0	+ 30.5	+ 27.6	+ 31.6	+ 33.5	+ 30.8	
1936	45.3	38.8	40.9	44.4	42.3	+ 31.1	+ 26.0	+ 28.8	+ 32.2	+ 31.5	
1937	42.2	36.8	36.5	38.0	38.4	+ 30.3	+ 26.3	+ 27.2	+ 27.7	+ 27.7	
1938	38.3	36.0	38.4	36.3	37.3	+ 25.6	+ 23.3	+ 25.6	+ 23.7	+ 24.5	
1939	37.3	31.3	27.8	24.6	30.3	+ 24.3	+ 20.9	+ 19.0	+ 15.4	+ 19.9	

the high level of building activity, the percentage of building workers unemployed was above the general average. The building boom of the middle 'thirties reduced, but did not extinguish, this excess unemployment, which was nearly as great in 1936 as in 1938. No doubt, a large part of the excess can be attributed to seasonal causes; and I have accordingly shown the position quarter by quarter over each year. In the June quarter, when building activity is at its seasonal peak, unemployment among building workers has normally been below the general average for all industries, and it has sometimes been below the average in the September quarter. But in December and to a smaller extent in March there has been an excess of building unemployment in every year, however intense the activity of the industry may have been. It may be argued that it is unfair to base any comparison on these two quarters, when employment is affected by weather conditions. But it can only be regarded as an extraordinary anomaly that in the 'thirties an expanding industry such as building should have shown even in the September quarter more often than not an excess unemployment.

When we turn from building to civil engineering, the figures become positively startling. Here is an occupation, or group of occupations, which, over the period under review, expanded its labour force from 160,000 to 290,000. Yet it showed in every year, not merely an excess of unemployment over the general average of all industries, but a gross excess; and the more its activity expanded, the higher the level of unemployment became. Excess unemployment in this group, which was already about 10 per cent. in 1928, had risen by 1936 to well over 30 per cent. Nor can the excess be attributed in this case to seasonal causes. It occurred in all four quarters of every year, though it was largest, as one would expect, in December, and least in June. There is no escape from the conclusion that Public Works Contracting was being made use of as a dump for the surplus labour of other industries, with the result that, the more civil engineering activity expanded, the larger the unemployment attached to it became.

The position in the building industry was much less startling; but it was peculiar enough. Between 1932 and 1936 the number

of insured workers increased by more than 150,000, and the activity of the industry expanded very fast. Yet even in June, at the height of its seasonal business, the rate of unemployment varied in these years from 10·7 per cent. in 1936 to 20 per cent. in 1933, and in the March quarter from 15 per cent. to 27 per cent. Even when full allowance has been made for the seasonal factor, these rates cannot but be regarded as excessive, and as indications of a grave waste of labour. Doubtless, this waste may have been regarded as unimportant when there was a general surplus of labour marked by a high average rate of unemployment over industry as a whole, though even then it meant a lowering of average earnings a long way below the nominal level of wages. What is clear is that such waste will be intolerable in the post-war period, when there is bound to be for some years at least an acute shortage of skilled building workers, even if there is not a general scarcity of labour in all trades.

The reasons usually given for the high unemployment rates in the building industry are, first, the essentially intermittent character of much building work, and secondly, the loss of working time owing to bad weather conditions. These are of course both real causes. There is in the building industry a great deal of shifting from one job to another, with loss of working days between jobs; and there is in the winter a good deal of lost time owing to weather conditions by the trades which work in the open. It is not, however, necessary to regard either of these things as irremediable. If the building industry is to be fully employed after the war on large planned schemes of reconstruction, there is no reason at all why jobs should be for the most part of short duration or why much time should be lost in shifting from job to job. It should be possible to put the greater part of the labour force of the building industry on the permanent 'strength' of the employing firms and to guarantee regular wages in return for regular work. As for 'wet time', there is little doubt that this could be greatly reduced by better organization, and would be very quickly reduced if the time lost in this way had to be paid for. The 'guaranteed week', which has been established on essential work during the war, will of itself, if it is continued, do a great deal towards solving

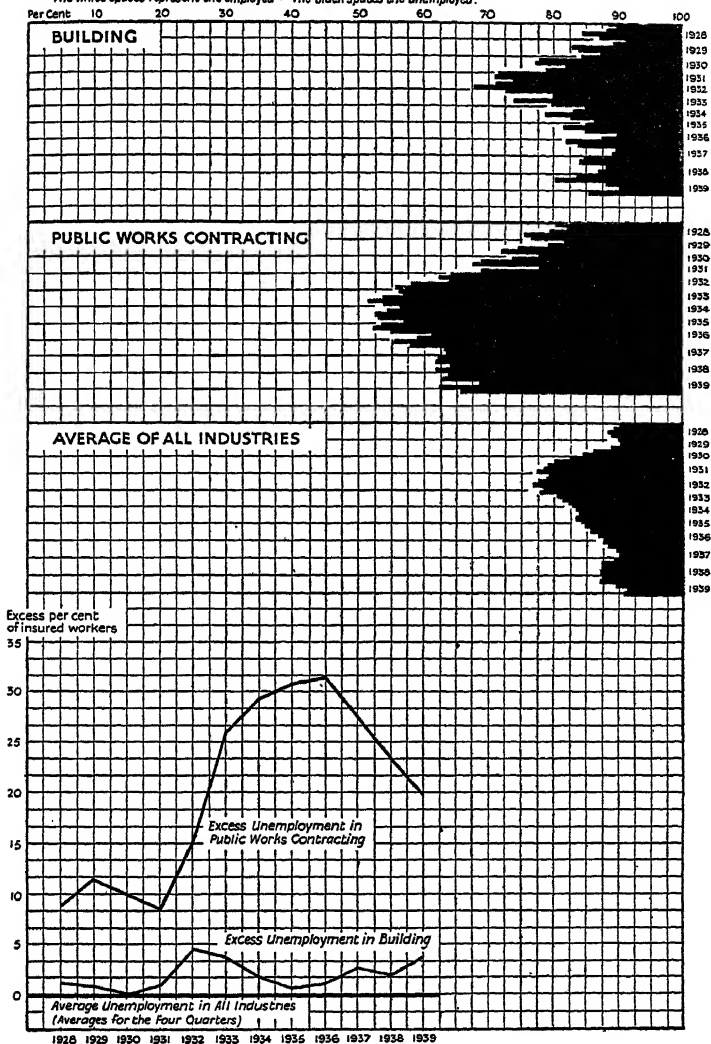
the 'wet time' problem, by causing employers so to organize the work as to allow for getting on with jobs that can be done under cover in bad weather—possibly to the accompaniment of some modification of the existing demarcation restrictions between trade and trade.

It should be easily possible, given proper organization of the work, to reduce the level of unemployment in the building industry to, say, 5 per cent. in the summer and 7 or 8 per cent. in the winter months—giving an average rate of a little over 6 per cent. throughout the year. This would mean an increase of about 14 per cent. in the productive capacity of any given labour force and would be a substantial contribution towards solving the problem of the shortage of building labour in the period immediately after the war. It would also undoubtedly mean a saving in cost; for the more regular labour would be more efficient, and in this way the actual increase in the output of a given number of workers would probably be well above 14 per cent.

I shall come back to this question when I am dealing with the post-war organization of the building industry as a whole. In civil engineering, the room for economy in the use of labour is obviously very much larger still. On the average of the years 1933-36 it needed about 180 men attached to public works contracting to set 100 men actually at work. If the margin of unemployment in this group, which is not subject to any serious seasonal fluctuation, could be cut down to 10 per cent., there would be an increase of well over 60 per cent. in the productivity of a labour force of any given size, even without any allowance for improved efficiency of those at work. A large improvement in this field should be much easier to bring about than in building proper; for most civil engineering projects are large, and if work after the war is arranged on the basis of a continuous plan, there should be no need for constant discharges and engagements, with spells of unemployment between. The main obstacle is, of course, here to be found in the character of the labour itself. The bulk of the work is heavy, and the men who engage in it are mostly—or were before the war—accustomed to very casual conditions of employment. There will be a serious danger of slipping back into the old, bad ways;

UNEMPLOYMENT IN THE BUILDING AND CIVIL ENGINEERING INDUSTRIES

The white spaces represent the employed — The black spaces the unemployed.



but it should be practicable to prevent this by efficient organization and systematic planning on the basis of regular employment and the guaranteed week.

These questions of economy in the use of the labour force are important, not only because there will be a post-war shortage of trained workers in the constructional industries, or because the pre-war conditions were demoralizing as well as wasteful and costly, but also because this group of industries employs practically exclusively male labour, and will make a large demand for the services of young men of good physique and endurance. Even if war casualties are lighter than they were in the First World War—a matter on which no assured prediction can yet be made—there will be a post-war shortage of labour of this type. One factor in determining the scale to which we can afford to expand the constructional industries, especially by the recruitment of additional apprentices, is the limitation on the total supply of young male entrants to industry as a whole. We must next consider this vital factor of post-war labour supply, as an important element in settling the scale to which the building industry ought to be expanded in order to cope with the coming demand.

IV

The prolonged experience of unemployment between the wars induced a state of mind in which it was usually taken for granted that no socially or economically desirable project need be held up for long by a shortage of labour. It was, of course, realized that there could be temporary shortages of particular kinds of skill, and that an area which was expanding its industries rapidly might be short of workers for a time, until enough immigrants had been attracted to it by the prospect of employment. But hardly anyone, except the population experts, was even considering the problems of a situation in which the supply of labour fell so far short of what was needed that desirable projects had perforce to be postponed. Even the population experts, studying the decline in the birth-rate and the prospective rapid fall in the British population, were usually more concerned about the effects of this decline on the demand for goods and services than about its effects on the numbers available for em-

ployment. This attitude was natural enough at a time when unemployment appeared to have become endemic and there seemed little or no prospect of a Government that would accept and act upon the responsibility for maintaining full employment.

As soon, however, as full employment comes to be accepted as an object of Government policy, and reckoned upon as likely to be achieved in the post-war period, the problem of labour shortage necessarily comes to the front. If all the available workers are to be employed in one job or another, it is obviously important to get them sorted out into the jobs in which they can render the most useful service; and this involves abandoning or postponing types of production which are regarded as less important than those which it is decided to undertake. If the volume of employment is something which the Government, by applying the correct measures, can regulate practically at will, this volume should obviously be made as large as possible, up to the point at which more work would encroach upon leisure which is regarded as more valuable than the goods and services which the additional work would create. The State, in planning for full employment, will need to work on the basis of a list of priorities, putting in hand from its list the projects which stand highest up the scale of need, down to the point on the list at which all the available surplus of labour has been taken up. There will then remain other projects, which cannot be put in hand at the time because there is available for them no labour that is not already better employed.

We have clearly to apply this concept of priorities to the drawing up of a building plan for the post-war period. We have to ask ourselves, not how much new building we should like to put in hand if we could get it done after the fashion of the Genius in *The Brass Bottle*—without any withdrawal of labour or resources from other potential uses—but how much labour and material and plant and organizing ability we can spare for building as against other things. At least, this is what we have to consider, if we are really determined upon following a policy of full employment. If we are not, we need not worry about the problem of shortage of labour; for we shall assuredly go back to mass-unemployment. I shall, however, assume that

this is not what we mean to do, and accordingly that a policy of full employment will be carried through. The question then is, How much labour of the types suitable for employment in the building industry shall we be willing to spare for such employment after the war?

Let us try to see first how much labour there is likely to be. If the war ends in 1945, the population of Great Britain, without allowing for war casualties beyond those which have been reported up to the end of the fourth year of war, will be only a little larger than it was in 1939. The increase will be of the order of a quarter of a million; but, of course, this may yet be entirely wiped out by further service and civilian casualties before the war comes to an end.¹ It seems the most likely assumption that, if the war ends in 1945, the population will not be significantly different from the pre-war population in total number.

It will, however, be considerably different in its composition, even apart from the effect of war casualties. It is easiest to begin by leaving out the casualties factor, and studying the probable composition of the post-war population as it would be if no casualties occurred. On this assumption, we set out from a total population larger by half a million than that of 1939. But this larger population would have in it many fewer young people and many more old people than there were when the war began. It would include 400,000 fewer children under 14 and 140,000 fewer young persons between 14 and 16, at one end of the scale, and about 660,000 more old people over 65 at the other end. The population of working age (14-65) would be larger by about 250,000; but this total would be made up of 440,000 fewer persons between 14 and 45, and 690,000 more persons between 45 and 65. These are not accurate estimates, but rough approximations; but they are near enough for practical purposes to what the position will be apart from casualties sustained in the war.

Our main interest, however, is not in total population, but in

¹ This estimate is based on a gross increase of about half a million, *minus* a quarter of a million service, mercantile marine, and civilian casualties (dead or missing). It assumes the return of all prisoners of war, and the survival of all wounded who have not died.

the section of it that is available for work—the ‘occupied’ section, according to the classification used in the Census, which includes employers and ‘independent’ workers as well as employees. We cannot say confidently how many people will be ‘occupied’, in this sense, after the war; for there may be, and in certain respects certainly will be, changes in social habits. For example, the raising of the school-leaving age will remove a considerable number of young workers from employment; and, as against this, it may be that more married women than before the war will earn a living outside the home. Old people may take to retiring earlier, or may remain at work longer: which they are likely to do depends partly on the character of post-war legislation for Social Security. Let us assume, in the first instance, that the same proportions of men and women in the various age-groups are ‘occupied’ after the war as were ‘occupied’ before it broke out. We shall then have, apart from war casualties, a post-war ‘occupied’ population larger by about 300,000 than in 1939; but there will be in it a quarter of a million fewer persons under 45, and about 550,000 more persons over 45, including well over 120,000 more over 65. The raising of the school-leaving age to 15 will reduce the total by about 400,000, all of course in the younger age-group; and the starting of part-time education at the rate of one day a week for those between 15 and 18 will mean a further reduction equivalent to about 300,000 full-time withdrawals. The fall will be larger if an increased proportion of children stay at school up to 16, even before the leaving age has been raised to 16. Thus, the school reforms already incorporated in the Education Act will leave us with a post-war ‘occupied’ population smaller by at least 400,000 than the ‘occupied’ population of 1939, unless there is such an increase in the number of ‘occupied’ women or in the proportion of persons over 65 remaining at work as to offset all war casualties.

An increase in the *proportion* of old people, as distinct from the absolute number, remaining at work after 65 seems most unlikely. The trend in the past has been very much the other way—towards earlier retirement—especially in the case of men, who constitute the great majority of the older workers. Between 1931 and 1939 the proportion of men over 65 still at

work fell, largely as a result of pensions, from 48 to 37 per cent. Even if this fall is checked, some decrease is much more likely than an increase. Accordingly, the only source from which there can come any large addition to the proportion of the 'occupied', to offset the effects of a higher school-leaving age, is to be found among women, and mainly among women under 45. Probably there will be an increase in this group, under conditions of full employment; but prophesying how large it is likely to be is guesswork. All that can be said is that it is quite unlikely to be as large as a quarter of a million, and that accordingly it will neither avail to offset the rise in the school age nor to cancel out war casualties, let alone both.

We must reckon, then, on the post-war 'occupied' population being substantially smaller than that of 1939, even if war casualties remain low and there is no continuance of the tendency towards earlier retirement at the pre-war rate.

These are general considerations, affecting the total size of the 'occupied' population. Building, however, is, and seems likely to remain, an almost exclusively male industry; and the amount of labour that can be assigned to it therefore depends primarily on the number of male persons who are available for employment. There is no room for any substantial increase in this field from males hitherto 'unoccupied'; for there were before the war very few 'unoccupied' males between 16 and 65, and the proportion 'occupied' under 16 is clearly destined to fall very much. If no allowance were to be made for war casualties, the 'occupied' male population aged 16 to 65 would be nearly 350,000 larger in 1945 than in 1939, and that over 65 nearly 100,000 larger; but the number between 16 and 45 would be smaller by nearly 30,000. In view of the fact that war losses are bound to bear very heavily on the younger men, there will clearly be a much bigger actual fall in this last group, which occupies a key position in meeting the demand for an increased supply of skilled workers in any industry dependent mainly on male labour.

In the absence of war casualties, the number of 'occupied' males aged between 16 and 65 would be in 1945 about 10,170,000, but part-time continued education for one day a week up to 18

would bring this total down by the equivalent of about 100,000. War casualties might reduce it further to about 9,500,000, or even lower. On the assumption that two-thirds of the workers employed in the building and civil engineering industries belonged to this age-group, they would together require over 935,000 of these 9,500,000, even if their total labour force were not raised at all above the pre-war level. Actually, in 1939 these two industries included about 8·7 per cent. of the entire occupied population. After the war, they may need 10 per cent., even without any increase in the numbers engaged in them. If they were raised to a combined labour force of two million, they would need nearly 15 per cent. of the available supply of male workers under 45, on the assumption that they were not taking more than the average share of the younger workers. In practice, however, any considerable increase in the total numbers employed in building and civil engineering would almost certainly mean a rise in the proportion of younger workers; for it is much more difficult to train older men for new occupations, and especially for occupations needing considerable physical strength and involving much outdoor work. We must reckon that any increase in the total size of the labour force engaged in building and civil engineering will be made largely by drawing on men coming out of the armed forces—that is, mainly on men under 45. This aggravates the difficulty of the problem; for there is bound, in view of the changed age-composition of the population, to be keen competition for the services of these younger men.

It would of course be best, if it were at all possible, to recruit the additional builders who will be needed largely by increasing the number of boys entering the industry by way of apprenticeship. But there are serious obstacles in the way. In the first place, apprenticeship of boys is necessarily a very slow method of increasing the supply of skilled craftsmen; whereas the need will be for the most rapid increase that can be got, in order to cope with large arrears of exceedingly urgent work. This factor alone will make necessary recourse on a big scale to emergency methods of training much faster than those associated with ordinary apprenticeship. But there is a second factor which makes it quite impracticable to secure any large expansion of

the skilled labour force by recruiting boys. There simply will not be enough boys available. In the absence of educational changes which would diminish the supply of juvenile labour, the number of new male entrants to all occupations in 1945 would have been about 310,000, of whom two-thirds would have been aged 14 and the remainder between 15 and 18. The raising of the school-leaving age will have the effect, whenever it comes into force, of wiping out well over two-thirds of a year's entry; and the introduction of part-time continued education will further reduce the supply. In subsequent years, of course, the annual supply will return to normal, save to the extent to which an increased proportion of boys stay on at school beyond the minimum leaving age.

If we leave out of account the immediate effect of raising the leaving age and introducing part-time continued education on the total supply of juvenile labour, and concentrate our attention on the supply of new entrants after the change has been made, we shall see clearly that it is out of the question for the building industry to increase its labour force at all rapidly by adding to its intake of boys leaving school. At their pre-war strength in relation to other occupations, building and civil engineering together would require about 8.7 per cent. of the new entrants, or less than 28,000 a year. Even if they were to double their pre-war share in the available supply, they could only get about 55,000 in 1945, including entrants to unskilled as well as to skilled occupations. Moreover, these totals would be smaller for subsequent years, as for some time ahead the number of new entrants to industry is bound, owing to the past decline in the birth-rate, to continue to fall.

It is therefore evident that the increased supply of workers for post-war building cannot come mainly from a higher rate of recruitment of juveniles. The building industry, like all others, will have to get used to employing a higher proportion of older workers; and, if its total strength is to be increased, it will have to find its new recruits partly from the older age-groups. It will not be able to get them merely by agreeing to take in a large number of quite young men released from the armed forces, though such men will no doubt form one important

source of supply. It will have also to take its share in the adaptation of the older men upon whom all industries will have to draw, and will be under the necessity of revising traditional estimates of the age beyond which a man cannot successfully adapt himself to work in a building trade.

CHAPTER VI

THE POST-WAR DEMAND FOR HOUSES AND FOR LABOUR TO BUILD THEM

OUR next task is to attempt to make some estimate of the amount of building that will be needed when the war is over. The only guidance yet given in any official quarter is the statement by the Government that it will be necessary to build approximately four million new houses over a period of ten or twelve years. This, we may note, will only just suffice to replace those houses which were already, in 1939, more than eighty years old, without allowance for replacing either newer houses destroyed by enemy action or houses which have already celebrated their eightieth birthday since 1939, or will be eighty years old or more well before the period of ten or twelve years is up. It is not, therefore, at first sight an ambitious programme: yet it does mean building, over a period of twelve years or so, nearly as many houses as were built between 1919 and 1939, including the period of boom in the 'thirties.

It is immediately obvious that the answer to the question whether four million houses will be enough depends mainly on the rate at which we propose to replace obsolete dwellings. Old houses *can* be patched up to last a very long time, if we are prepared to act on the principle that any old house will serve. On the other hand, in view of the very large number of elderly houses still in occupation, even a small advance in housing standards will involve extensive replacement of existing dwellings, quite apart from any question of the existing houses being in the right places in relation to the *optimum* location of industry and population after the war.

We have seen that, in the nineteen-thirties, houses were being built at an average rate of about 350,000 a year. As against this, the Government's programme of four million houses works out at 400,000 a year, if it is to be finished in ten years, but at only 333,000, if it is to be spread over twelve years. It may thus be either higher or lower than the pre-war rate, but seems likely

to be rather higher in the later years in view of the fact that no more than 300,000 houses in all are expected to be built or building by the end of the first two post-war years. We shall not go far wrong if we assume that the Government is at present planning to build after the war approximately at the pre-war annual rate. It must, however, be borne in mind that a large part of the post-war building will have to go towards making up arrears. Five years' arrears at the rate of 350,000 houses a year means a total of 1,750,000 to be cleared off before any contribution can be made to meeting new or current needs.¹ Even if this clearing off is spread over twelve years, at an annual rate of about 145,000 houses a year, the effect is to reduce the post-war programme, in relation to current needs, from about 350,000 a year to little over 200,000. Moreover, this figure makes no allowance for the replacement of houses destroyed by bombing, for the replacement of bomb-damaged houses patched up to last for a time, for special clearances in connection with urban re-planning, or for any of a number of other special factors of which account will have to be taken in planning the post-war housing programme. Even if we make only a minimum allowance for these factors, it is plain that a Government plan to get building done at a post-war rate of approximately 350,000 houses a year means that the number available for meeting current needs will be, not even 200,000, but a great deal less.

It is therefore evidently inadequate, unless the pre-war rate of building was greatly in excess of current requirements, or unless the current need after the war will be very much smaller than it was in the 'thirties. Various statisticians attempted, in the pre-war years, to estimate current housing needs on a number of different assumptions. Any such estimate has to start out from an attempt to assess the number of families needing accommodation. On this basis statisticians reckoned that, for the decade 1934-1944, the annual need for houses to be occupied by additional families was a little under 50,000. This estimate can be allowed to stand for the post-war period, for as we have seen, the impending fall in population will not carry with it any parallel reduction for some time in the number of families needing houses. On the contrary, the number of households will

¹ For the question whether arrears should be put as high as this, see page 149.

increase owing to the higher numbers of adults; and this increase will be especially great just after the war, when a large number of new families whose establishment has been delayed by war conditions will be urgently wanting to set up homes. Accordingly, while 50,000 may be a reasonable annual average over ten or twelve years, a large part of the demand will come at the beginning of the period. To some extent this will be met, for the time being, by the provision of temporary houses. But this expedient, while it will serve to spread the need for permanent houses more evenly, will of course do nothing to reduce its total amount. We have, then, an approximate figure of 50,000 houses a year which will be needed to provide for additional families.

The second factor which has to be taken into account at an early stage in making any estimate of current needs is replacement of obsolete houses—by which I mean, in this context, not replacement due to any raising of standards or measures to prevent overcrowding, but only ‘normal’ replacement in the narrowest sense; that is, the building of new dwellings to replace those which are either pulled down to make way for other buildings, or are converted into offices or institutions of one sort or another, or become disused as no longer habitable at the existing minimum standards or because they are in the wrong places, so that no one will live in them even if they are physically in habitable condition. We have estimates, made in the ‘thirties, of the annual rate of disappearance of houses owing to these causes: it was about 70,000 houses a year, not including the effects of slum-clearance or of any measures designed to raise current standards of accommodation. The rate is certainly not likely to be lower after the war: it is, indeed, certain to be higher because of the very large number of old houses which were already near the end of their useful lives in 1939. If the four million houses which were then eighty years old or more were replaced over twenty years, this would give an annual replacement need, not of 70,000, but of 200,000, not including replacements due to the pulling down of useful houses to make way for other building or planning, or the loss of houses by conversion into offices, or for other non-residential occupation. Clearly, however, the adoption of this basis of calculation would

involve bringing slum-clearance into the account, as it is directed mainly to dealing with obsolete houses. As it seems better to deal with slum-clearance separately, we can tentatively put the sheer replacement need as defined earlier in this paragraph at a minimum level of 100,000 houses a year, bearing in mind that we have already provided for some replacement of obsolete houses under the heading of arrears, and must not count these twice.¹

Slum-clearance schemes, on the basis of what was actually being done and planned before the war, were reckoned in the early 'thirties as involving a need for about 35,000 new houses a year to complete the existing programme over a period of ten years. Any raising of standards would of course mean an increase on this figure. Let us leave it as it is, and consider the question of higher standards at a later stage. It is at any rate certainly desirable to carry on with slum-clearance at the pre-war rate; and these 35,000 houses a year can therefore be added on to our estimate of basic requirements.

The next factor is overcrowding. The Overcrowding Census of 1936 showed that a substantial proportion of the population was living under grossly overcrowded conditions—worst in parts of London and Wales and in North-Eastern England, but with many very bad patches elsewhere. It was announced as Government policy that overcrowding beyond a certain point should be actually prohibited by law: and two alternative standards—a higher and a lower—were laid down, with the idea that the lower standard should become immediately applicable as a guide to policy, and the higher be approached as soon as possible. These standards were based on laying down certain 'permitted numbers' of persons per room. The lower standard was such as to allow 2 persons to a single room, 3 to 2 rooms, 5 to 3 rooms, 7½ to 4 rooms, 10 to 5 rooms, and thereafter 2 persons for each additional room. In this calculation 'person' means adult: children under 10 years of age count as only half a person. There is also some differentiation of 'rooms' according to size. Rooms of less than 50 square feet do not count, and rooms of less than 110 square feet count only as a fraction of a room. Only living and sleeping rooms are included: bathrooms, sculleries, and other offices do not count. At this very low standard, nearly

¹ See page 143.

4 per cent. of the houses in England and Wales were found to be overcrowded in 1936, and they contained, of course, much more than 4 per cent. of the total population.

The prevention of overcrowding, at this low standard, is not in itself a very formidable problem. It could have been dealt with, over a period of ten years, by building additional houses at the rate of about 60,000 a year—provided, of course, that the houses had been made available at rents which the overcrowded households could afford to pay. But the lower standard adopted in the Overcrowding Survey was not good enough to be acceptable as a foundation for post-war programmes. We must, therefore, turn to the higher of the two standards laid down in the Survey.

This higher standard, called in the Survey 'a hypothetical overcrowding standard', was drawn up in order to define a standard intermediate between the statutory standard laid down in the Housing Act of 1935 for the purpose of defining illegal overcrowding, and the considerably higher standard laid down in Section 37 of the Housing Act of 1930 for application to the re-housing activities of local authorities in the building of new dwellings. The standard of 1930 is based on bedrooms only, and lays down that a new house containing 2 bedrooms shall count as providing accommodation for 4 persons, one with 3 bedrooms for 5 persons, one with 4 bedrooms for 7 persons, and so on. The hypothetical standard given in the Overcrowding Survey is too detailed for full description here, but is broadly designed to provide a sufficient minimum of accommodation for the household without the necessity of using the living-room or rooms for sleeping purposes. It results in no change in the case of the smallest households, but in a considerable increase in the requirements for the housing of large families.¹

The adoption of this higher standard in assessing the incidence of overcrowding would require, in terms of a ten years' programme, additional building at the rate of about 75,000 houses a year.

If we add up the requirements of which we have taken account up to this point, we get, apart from war-time arrears, an annual housing need made up as follows:—

¹ The details can be found in Table VII, page xv, of the *Report on the Overcrowding Survey in England and Wales, 1936* (H.M.S.O.).

TABLE X
THE POST-WAR NEED FOR HOUSES, EXCLUDING ARREARS AND
WAR DAMAGE

	<i>Annual Rate Houses Needed</i>
Additional Accommodation for New Families .	50,000
Replacement of demolished or disused dwellings (excluding bomb-damage)	100,000
Slum-clearance on basis of pre-war programmes continued	35,000
Abolition of Overcrowding (at lower standard) .	60,000
Abolition of Overcrowding (at higher standard)— additional need	75,000
	<hr/> 320,000

This estimate would appear at first sight to show that during the years just before the war we were in fact building new houses at a rate considerably in excess of current needs, even after making allowance for slum-clearance and for the elimination of overcrowding at the higher of the two standards made use of in the Survey of 1936. Some writers have indeed attempted to show that, if building had continued for a few more years at the pre-war rate, the need for houses would have been completely overtaken, and the current requirement would have been reduced to the relatively small number needed to house the additional families and to replace houses going out of use in the ordinary way. This conclusion is, however, thoroughly misleading because it ignores the fact that the annual rate of disuse or demolition of old houses was far too low, and that many houses which were really unfit for habitation were retained in use simply because there was no alternative accommodation to which their inhabitants could afford to move. We have made some allowance for this factor by raising the allowance for replacement of demolished or disused houses from a pre-war level of 70,000 a year to 100,000, and also by taking account of the high rate of

obsolescence in our estimate of arrears; but these allowances were made simply to take account of the exceedingly high average age of the houses built before 1914, and were not intended to include any provision for an actual improvement of housing standards.

Moreover, the purely statistical test of housing needs is seriously misleading. The new houses that were being built during the 'thirties did not all go to reduce the need. Many of them were taken by families which did not, in moving into them, release dwellings to be occupied by persons statistically in need of better houses. Most of them were built, not for the worse-paid classes of the population, but for the relatively well-to-do, who no doubt by moving into them released a certain number of older houses for accommodation by persons who were less well off. But the release of older houses was by no means equal to the number of new houses erected. Some of it went towards reducing the amount of 'doubling', i.e. two or more households occupying a single dwelling, not necessarily in such a way as to come within either of the definitions of overcrowding. Some of it housed families which moved from relatively depressed to relatively prosperous areas; and so on. The 30,000 houses in excess of current statistical need which we appeared to be building in the years before 1939 were in fact absorbed by forms of demand falling outside the statistical definition of housing needs.

It seems reasonable to conclude that the pre-war rate of house-building—roughly 350,000 houses a year—was just about enough to cover current needs at the existing standards, including a modest contribution to slum-clearance, in relation to the pre-war definition of what constituted a 'slum', and a substantial contribution to the reduction of gross overcrowding, at the higher of the two standards to which I have referred. This, however, does not mean that overcrowding was being got rid of at anything like the rate at which it could have been if the number of new houses built had been the only factor. This was not happening, because the overcrowded households could not afford to move into better houses, new or old; and the additional accommodation therefore went largely to improve the housing of those families which were, according to the purely statistical measure, already adequately housed.

The upshot of this argument is that, if there were no arrears to be made up, no bomb-damage to be made good, and no revision of pre-war ideas of obsolescence or satisfactory minimum standards, a total house-building programme of 350,000 houses a year would probably be just about enough to meet post-war requirements, provided that it could be eked out by a large amount of temporary building during the period immediately after the war. This, however, is true only in a purely quantitative sense. The rate of 350,000 might be adequate, on the assumptions just made; but the programme would not be satisfactory, even on these assumptions, unless a high proportion of the additional houses were made practically available for families living either under overcrowded conditions or in houses unfit for further habitation.

If we take 350,000 houses a year as about the right target for meeting current needs at pre-war standards of adequacy, we have, in formulating our post-war programme, to add to this total whatever is regarded as the right contribution towards clearing off war-time arrears. We have seen that, on the assumption of a five years' war without any new house-building, the accumulated arrears would amount to 1,750,000, and would take twelve years to clear off at an annual rate of 145,000. It has, however, to be taken into account that it will be impracticable for at least two years after the war ends to make any contribution at all towards clearing off these arrears. It is, indeed, much more likely that further arrears will pile up. On the Government's own showing, only about 300,000 houses will be even begun at the end of a period of two years after the war. If we regard 150,000 of these as finished by the end of the second year, and treat the other 150,000 as forming part of the programme of the third year, this will leave an additional accumulation of arrears to the extent of 550,000, raising the total arrears to 2,300,000. To wipe these arrears off over the ensuing ten years would involve an additional construction of 230,000 houses a year.

It is true that against this total we have to set something for the small number of houses which have been built or finished during the war years, including the dwellings, largely hostels, built in connection with Government war factories. These

total, perhaps, about 200,000; but the usefulness of many of them for post-war housing is doubtful; and an allowance of 100,000 is the most that can be made on this account. On the other side, no allowance has yet been made for bomb-damage or for special clearances in connection with the re-planning of bombed areas. It is not possible to make any exact estimate under this head, not only because the ultimate extent of bomb-damage is still uncertain, but also because the form of re-planning is unknown. Damaged houses may be patched up to last for a few years, while the shortage remains acute; and a greater or smaller part of re-planning schemes may be deferred over the same interim period, so as to postpone demolitions. But, if we are thinking in terms of as long a period as ten or twelve years from the end of the war, an annual allowance of 50,000 new houses in replacement of bomb-damaged dwellings and of dwellings scheduled for clearance in bomb-damaged areas is certainly on the low side, even after treating the 100,000 dwellings available as a result of war-time building as a contribution to meeting this part of the need. Indeed, this figure of 50,000 is manifestly too low to allow for any really large measures of urban re-planning, and should be regarded simply as replacement of bombed dwellings *plus* minor demolitions in heavily damaged areas.

If we add in these further post-war requirements, we get the following result:—

TABLE XI
THE TOTAL POST-WAR NEED FOR HOUSES

	<i>Annual Rate Houses Needed</i>
Houses needed to meet currently accruing needs .	350,000
Houses needed to clear off arrears within 12 years of peace	230,000
Houses needed to make good bomb-damage . . .	50,000
	630,000

The fulfilment of this programme would mean that, over a period of twelve years from the end of the war, we should have built roughly 6,500,000 new houses. But if, over the same period, we had done no more than demolish the 4,000,000 houses which were already, in 1939, over eighty years old, *plus* the further million which will by then have reached that venerable age, the net addition to the number of houses, after allowing for bomb-damage and conversion of dwellings to other uses, would be well under 1,000,000. This would give us a total of about 13,000,000 dwellings, which would be just about enough to house the number of separate families we may expect to be requiring dwellings a dozen years after the end of the war. The estimated number of families in 1939 was about 12,360,000; and the estimated number now, in 1944, would be about 12,800,000, if the persons at present in the armed forces were back at home. Accordingly, the number of dwellings that would result from an annual building rate of 630,000 is by no means excessive.

Is such a rate of building practicable? Under pre-war conditions, it took a man roughly a year to build a house—by which I mean that, for every house built, it was necessary to assign the labour of one building worker in regular employment for a year. Therefore, at pre-war standards of efficiency, a house-building programme of 630,000 houses a year would require the labour of 630,000 *employed* workers, and of as many more *insured* workers as may be regarded as necessary to provide a reasonable margin. Let us say that this number would be somewhere between 660,000 and 675,000—even the higher total implying a much lower ratio of unemployment and under-employment than existed in the building industry before the war, even at times of boom. Can we spare even 660,000 workers for house-building, in face of the rival claims on national manpower?

The answer depends partly on the *general* demand for labour from all industries and employments, and partly on the demand for labour for other forms of building. Let us leave over for the moment the questions whether the efficiency of the building industry can be so improved (over and above a reduction in its ratio of insured to employed workers) and whether we can make

building labour go further and produce a higher gross output by resorting to methods of pre-fabrication and standardized construction, which will both make building labour more productive and relieve it of part of its task by transferring a part of the production to workers in other industries. We shall have to come back to these questions; but we can deal with them better when we have considered what the demand for building labour is likely to be outside the field of house-building, and have thus arrived at some idea of what the total demand for it, or for substitutes for it, is likely to be.

We have seen that, in 1938, house-building accounted for approximately 40 per cent. of the total employment of labour in the building industry. At this ratio, a building industry capable of producing 630,000 houses a year would require a total labour force of about 1,650,000 insured workers, as against about 1,050,000 in 1938. This, however, is on the assumption that the expansion of other kinds of building would be on the same scale as the expansion in the house-building section, and also on the assumption that repair work would absorb the same proportion of the total labour force as it did in 1938.

Actually, the distribution of building labour in 1938 was substantially affected by rearmament, which had diverted a good deal of activity from house-building to other forms of construction. The housing boom passed its peak in 1937, whereas other building continued to increase sharply in 1938 as a result of factory construction and other measures of war preparation. In 1936 house-building accounted for over 45 per cent. of the total activity of the industry, repairs for about one-third, and other building for the balance of 20-22 per cent. These are probably fairer proportions to take as a basis for long-run post-war conditions, though a great deal must depend on the extent to which industry embarks on a large-scale programme of factory modernization. This in turn depends largely on the amount of change in industrial location, which is a matter mainly of Government policy—for extensive changes in location are unlikely unless they are deliberately planned in connection with the setting-up of new towns and industrial trading estates based on the great factories built for war purposes.

If house-building turns out to need 660,000 workers and to

constitute 45 rather than 40 per cent. of the total demand for building labour, the total need of the industry will be for fewer than 1,500,000 workers, instead of 1,650,000. But this total takes no account of any abnormal post-war demand for repair work, whereas the heavy arrears of normal maintenance and repairs that have accumulated during the war make it certain that there will be a very heavy excess demand for such work for a short period, after which the demand will presumably fall back to a more normal level. This temporary excess demand will coincide in time both with the demand for labour to put war-damaged houses back into habitable repair for a short period, even where they are not regarded as capable of serving for more than a few years, and also with the demand for labour for the erection on the site of pre-fabricated temporary dwellings. It is therefore clear that the amount of labour needed for repair work and for work on temporary housing will be greatly swollen for a short time after the war; and this will, of course, be one of the principal factors delaying the expansion of permanent house-building, until the necessary short-term requirements have been met.

Thus, the allocation of one-third of the total labour in the building industry to repairs and maintenance is meant to be exclusive of the excess demand for this type of work which will continue for perhaps two years after the end of the war. The long-period requirement for labour in repair and maintenance work can be put at one-third of the total labour force needed, round about 500,000; but during the first two years, and perhaps rather longer, there will be an excess demand for the services of about a quarter of a million additional workers, whom it will thereafter be possible to divert to house-building or to other kinds of constructional work.

The largest single element in this excess demand will be the need to catch up with war-time arrears of repairs and maintenance. Before the war, this section of the building industry had a labour force of about 400,000, including small working masters who do not appear in the total of insured workers. During the war, at least half the normal repair work is being postponed, even after allowance has been made for the maintenance of factories at a higher level than houses or other buildings. This

means that the rate at which arrears of repairs have been accumulating over five years of war is equivalent to a year's labour of about 200,000 men for each year, or, in all, a year's labour for a million men. In fact, of course, not all the postponed repairs will ever be carried out. Let us scale down this figure by one-half in order to allow for this. We have then a need for a year's labour of 500,000 men, or for the labour of 250,000 men spread over two years. Making up of arrears of repairs cannot well be spread over more than two, or at most three years. It may have to be spread over three years, on account of the additional demand for labour for temporary reconditioning of seriously damaged houses and for the erection of temporary dwellings. A quarter of a million men, at reasonably regular work over three years, may just suffice to deal with these forms of emergency demand.

This means that, if the total building labour force numbers 1,500,000, the force available for meeting the total needs of new permanent housing, other new building, and *normal* repairs will be, for the first three years after the war, no more than 1,250,000. At the 45 per cent. ratio for house-building, such a force would be able to build rather more than 500,000 houses a year. But, of course, the building industry will not have a labour force of anything like this number immediately after the war. The key factor here is the number of skilled workers who are likely to be available. Now, in 1939, the skilled labour force of the building industry numbered at most 550,000—it was 523,000 for the seven principal skilled crafts in 1938, the most recent published figure. From this total we have to deduct five years' wastage due to death, retirement, or migration to other occupations. On a pre-war basis, annual wastage can be put at about 4 per cent. On this basis, the number of skilled men available will have fallen, at the end of a five years' war, to less than 450,000, without allowance for any migration beyond the normal to other occupations on the one hand, or for the entry of any new skilled recruits on the other. There has, of course, been in fact a very large migration out of the building industry, which has been drastically scaled down, both into the armed forces and into munition work of various kinds; and, even apart from war casualties, it cannot be taken for granted that all the migrants

will be willing to return to building work. Moreover, there has been a sharp check during the war to the inflow of new recruits to the skilled building crafts, and a good many of those who had made a start as apprentices have not completed their apprenticeships. The inflow, which was about 20,000 a year before the war, including both men finishing apprenticeship and men getting employment in a skilled trade without regular apprenticeship, certainly cannot have been more than about 30,000 during the whole of the war period, as against a normal intake of 100,000.

This leaves still to be taken into account the factor of war casualties, which it is of course impossible to estimate at this stage. It would, beyond doubt, be a highly optimistic assumption that, even after demobilization is complete, the building industry can expect to have available a skilled labour force of as many as 400,000 in all. Unless, however, there is a pronounced alteration in the ratio of skilled to unskilled workers, a building industry of 1,500,000 will need the services of 750,000 skilled men. There will be a gap of 350,000 skilled workers needing to be filled.

I shall discuss in the next chapter the methods that are open for filling this gap, and the proposals that have already been brought forward by the Government for this purpose. It is, however, clear that, whatever measures may be adopted, the filling of the gap will take time. Under the ordinary systems of apprenticeship in the building industry, it takes five years or longer to produce a skilled craftsman. Obviously, much speedier methods will have to be used after the war; but even with the speediest methods that are practicable without a dangerous permanent lowering of labour standards, the process of replenishment is bound to take a considerable time. It will be a matter, not of months, but of years to bring the building industry up to an effective labour force of 1,500,000, even if the job is tackled energetically and given a high priority among projects of reconstruction which need to be started well before the war is actually at an end.

It may be objected that this estimated need for 750,000 skilled workers—that is, for an addition of at least 350,000 to the number likely to be available at the end of the war—rests on an

unwarranted assumption that the total post-war labour force will need to include about 50 per cent. of skilled craftsmen. Surely, it will be argued, the labour employed in the building industry can be 'diluted', in the same way as the labour employed in the war factories has been 'diluted' in order to meet the needs of war. I doubt if it can—to anything like the same extent. We have seen in the previous chapter that there was no significant change between 1919 and 1939 in the proportion of skilled to unskilled workers in the building industry, though there were important changes in the proportions belonging to different crafts. Bricklayers increased in relative numbers, while masons fell off; plasterers increased, while painters fell off; and there was a small shift from the older crafts as a whole to newer types of skill, such as constructional engineering and, of course, electrical installation work (which is not classified as belonging to the building crafts). In total, these shifts about cancelled out, leaving the proportion of skilled men of all types practically unchanged. It may be that the introduction of mass-methods of pre-fabrication will alter this situation; but I doubt if the alteration will be large. There will, of course, be a tendency, if pre-fabrication is widely adopted, to shift some work out of the building industry altogether into the factory industries in which the mass-produced components are made; but this will not necessarily alter the *proportion*, though it will affect the *number*, of skilled workers needed on the site. The effect of extensive pre-fabrication might be to make my total estimate too big; but there are several reasons why I doubt if in fact the numbers I have assumed to be necessary will prove to be in excess of the need.

In considering this aspect of the matter, it is necessary to distinguish between pre-fabrication of house-shells and pre-fabrication of standard components and fittings. I venture to doubt whether, apart from temporary housing, there will be any extensive resort to pre-fabrication of the house-shell. My estimate of the demand for labour, it will be remembered, did make allowance for the pre-fabrication of temporary dwellings, and included only such workers as would be needed for the actual erection of such dwellings on the site. If the shells of permanent houses continue to be made of the traditional materials—brick,

concrete, or in certain cases stone—the demand for skilled workers in the ‘trowel trades’ and in such work as steel-bending and concrete mixing and shuttering will remain high. As against this, pre-fabrication of components and fittings may well reduce the demand on the site for the labour of plumbers, carpenters and joiners, heating engineers, and certain other crafts. But the demand for carpenters and joiners will be largely transferred into the factories; and the reduction in the demand for the services on the site of members of the remaining crafts will not be large enough greatly to affect the global figures. Components and fittings are to a large extent pre-fabricated already: the effects of standardization and mass-production will be felt much more in a reduction of the amounts of skilled *factory* labour needed to produce them than in a reduction of skilled labour on the site. The number of plumbers needed in the building industry may be reduced; but there were only 45,000 plumbers in all in 1938, out of 550,000 skilled building craftsmen; and even a fall of 20 per cent. in the number required would not amount to much in relation to the skilled labour problem as a whole. The other crafts likely to be much affected are a good deal smaller—except the carpenters and joiners; and in their case, as I have said, a good deal of the change would take the form of a transfer from work on the site to factory work.

I shall return to this whole question of pre-fabrication later; but for the present I do not propose, on account of it, to make any substantial reduction in my estimate of the skilled labour force that is likely to be required. Anyone who differs from me is free to make his own adjustment; but he must try to do so realistically, craft by craft, and not by an arbitrary scaling down of the total figure by a proportion based rather on a belief in the virtues of pre-fabrication than on any real estimate of its probable effect on the demand for skilled building labour. He must, moreover, take account of the higher standard of fittings that seems certain to be demanded in the post-war house, as a factor tending of itself to increase the demand for skilled labour on the site—for fittings have to be fitted, even if they are largely factory-made.

CHAPTER VII

THE POST-WAR DEMAND FOR BUILDINGS OTHER THAN DWELLING-HOUSES

MUCH more than the demand for dwelling-houses, the demand for buildings of other kinds is a matter of policy. It depends primarily, as we have seen, on what is done to re-shape the economic structure of Great Britain, so as to adapt British industries both to cater more effectively for the needs of the home market and to expand exports as a means of paying for necessary imports. It depends also on what we decide to do about the creation of new towns and the re-distribution of industry and population about the country, about improving agricultural standards and conditions, and about the development of improved community services of many kinds in town and country alike.

Accordingly, in this chapter I am not making estimates of absolute needs, or even of what is involved in the acceptance of certain standards which are generally accepted as socially desirable, so that the only question is how quickly we can come up to them. I am embarking on controversial questions of policy, about which men neither do nor can be expected to reach general agreement. I am saying what, in my view, needs doing and can be done, and am making tentative estimates of what is involved in the acceptance of the policies which I believe to be right. The distinction is not, of course, absolute; for there is a considerable element of controversial policy even in drawing up a housing programme. But the policy element is so much larger a part of the whole in relation to non-residential building that I think the distinction is useful, even if it is not valid at all points.

I

Industrial Building

Let us take first the question of industrial building, in the sense of building factories and other productive establishments, power

plants, water concerns, transport equipment of a constructional type, depots and warehouses, and the like. The decision to build or not to build such capital constructions has rested hitherto, except under war conditions, mainly with business men, and not with the State. The finance has come either out of the reserved profits of existing businesses, which can of course be invested either within their own undertakings or elsewhere, or from the capital market by way of new capital issues, public or private, or to a smaller extent from bank advances, which are not supposed to be available for such purposes in the ordinary way, but are in fact sometimes made available. In certain parts of this wide field, the State is accustomed to act as entrepreneur. The State builds roads, post-offices, and, exceptionally, productive establishments for making goods needed for public use; and it also allows, and sometimes aids, local authorities to create public utility plants in connection with 'municipal trading'. In addition to these direct forms of 'public enterprise', there have been cases in which the State has either itself promoted capital construction of an industrial type—e.g. the building of the Electricity Grid—or has helped private enterprise by loans or subsidies or by special facilities for raising capital—e.g. the help given to the railways in raising capital, or, in a different field, the building subsidies granted to shipowners. In general, however, decisions about investment or re-investment of capital in business enterprises have hitherto rested with private persons or bodies, though they have often been influenced by public policy—as they were after 1931, when the introduction of a tariff led to a considerable investment of money in factories designed to produce goods for the home market under cover of the protection afforded against competitive imports.

The demand for industrial building is made up of replacement of obsolete factories and other constructions and the erection of new factories, etc., and extensions of existing establishments. Its total depends both on the rate of investment in new means of production and on the rate of replacement of existing means. If, after the war, Great Britain takes measures to maintain the total demand for labour at a satisfactory level (by what is called a 'full employment policy') additional capital equipment will be needed to provide for this higher level of employment. How

much this will mean in terms of industrial building will depend on a number of factors—on the extent to which plant which was under-used before the war can be more fully used, so as to afford employment to more workers, on the extent to which factories built for war purposes can be adapted to other uses so as to serve the needs of expanding industries in time of peace, and on the nature of the industries in which the expansion occurs in respect of the quantities and types of building which they need. As for building required for replacements of existing factories, the post-war demand will depend on the extent of the openings for increased efficiency offered by the erection of new factories or migration to vacated war factories in preference to patching up old ones, on the extent of the changes in the relative demand for factories of different kinds in different branches of production, and on the extent to which the State and the local authorities, in their re-planning schemes, cause a migration of industries from their present establishments in congested urban areas to new sites better placed from the standpoint of civic amenity.

In face of all these uncertain factors, it is evidently out of the question to put forward any precise or unqualified estimate of the post-war demand for industrial building. What is clear is that no estimate based on the amount of such building that was actually being done between the wars can be of any relevance. Great Britain between the wars was neither affording full employment to the available supply of labour nor applying new techniques of production at anything like the pace at which they could have been applied under more favourable conditions of market demand. Total investment in productive industry was at a low level; and over a wide range of industries much more attention was being given to the elimination of 'surplus capacity'—that is, of plant which entrepreneurs regarded as in excess of the needs of the market—than to the erection of additional means of production. Except in quite few industries, such new construction as occurred was in replacement of obsolete factories and plants rather than for the expansion of total capacity; and often replacement was on the basis of a smaller capacity than was destroyed and written off.

Despite these replacements of old by new plants, the number

and proportion of very old factories still working remained exceedingly high. Industries which were doing badly in a financial sense could not easily raise capital either for development or for the replacement of plant which was evidently obsolete. Even where machinery was kept reasonably up to date, production often continued to be carried on in old and inconvenient buildings in which it was impossible to organize the routing of jobs on really efficient lines; and many factories were on cramped urban sites on which there was no room for efficient reconstruction. There was, no doubt, quite enough new factory construction in certain areas—notably round London—to give to those who lived in these areas an impression of very rapid development and technical change. But anyone who, having formed his judgments through the windows of his car on the main roads leading out of London, found himself transported to the older industrial districts of the North of England, soon had to revise his conclusions. There were in 1939 still plenty of towns in the older industrial areas which looked as if, in the matter of factory building, hardly anything had been done in them for at least a generation.

It was also, of course, very noticeable that, where new factories had been built, the methods of construction were usually a great deal less solid and massive than those which were favoured in the nineteenth century, and even up to 1914. The new factories were not built to last, physically, nearly so long as the old. Broadly speaking, the old assumption appears to have been that, even if the methods of production changed, it would be only a matter of putting new machines into old buildings; whereas the modern technician regards the building as essentially a part of the productive equipment, rather than a container for it, and stresses the need for designing buildings and machinery together, so as to secure the fullest efficiency in factory organization. This means designing, wherever possible, structures that will be cheap in capital cost, because the capital value will have to be written off over a quite small number of years. The development of structural steel and concrete makes such light factory building possible, and also facilitates a lightness and airiness in the interior which by central heating systems and the better control of atmospheric conditions can be adapted to

seasonal requirements. Even with these new devices, the capital cost of factory building in terms of materials and man-hours of constructional labour has been considerably reduced; but this of course does not imply a fall in the total cost over a prolonged period, if the new types of structure are meant to be more often replaced.

What this involves is that, under the new conditions, any given volume of demand for an expansion of industrial capacity will make a smaller call on building materials and building labour than it would have made under the older conditions of more solid and durable construction, but that a boom in industrial building is much less likely than it used to be to be followed by a slump in the demand for such building, because there is likely to be a steadier and more frequent demand for reconstruction. This, of course, applies with even greater force to the demand for machinery and capital equipment; but it applies to building for industrial purposes with enough force to make it a highly relevant factor in estimating post-war needs.

'Straight' building is not, in most forms of large-scale production, a large proportion of total capital expenditure on new industrial equipment; and even a considerable post-war development would not make very large claims on the supply of building labour. In the 'thirties, before rearmament had begun to affect the position, total expenditure on all forms of industrial and commercial building, including shops, offices, cinemas, public-houses and garages as well as factories, probably varied from £40 millions to £70 millions a year, out of a total expenditure of from £300 millions to about £370 millions on buildings of all kinds. Certainly less than half this total—probably much less than half—was industrial building, which accounted for less than one-tenth—probably much less—of total building activity. Even if these figures are useless as the basis for an estimate of post-war needs, they serve to show that a considerable expansion would be possible without any large call on the services of the building industry. The principal effect of industrial development on the demand for building labour is likely to be manifested, not in the demand for factories, but rather in the resulting demand for buildings of other kinds—garages, cinemas, public-houses, halls, libraries, community

buildings, and so on—in the areas in which money incomes are increased through the enlarged volume of local employment.

The need for industrial building is likely to be higher after the war in connection with changes in the character, as well as in the location, of British industry. In the accompanying Table

TABLE XII

NET OUTPUT OF BRITISH MANUFACTURING INDUSTRIES IN 1924, 1930, AND 1935, EXPRESSED AS A PERCENTAGE OF TOTAL OUTPUT OF ALL INDUSTRIES COVERED BY THE CENSUS OF PRODUCTION

	1924 %	1930 %	1935 %
Mines and Quarries	13·7	9·6	7·8
Building and Building Materials . .	8·9	11·0	10·4
Timber Trades	2·1		
		13·0	10·8
		2·6	2·6
			13·4
Chemicals	4·1	4·7	5·3
Iron and Steel	6·2	6·0	6·9
Engineering, Shipbuilding, and Vehicles .	12·7		
Other Metal-working	1·6	22·6	15·2
		1·6	1·8
			23·9
Textiles	13·6	9·1	9·1
Clothing (including Boots)	6·0	16·0	5·6
Leather	0·8		
		0·7	0·7
			15·4
Food	6·2	6·8	7·3
Drink	3·9	12·9	4·0
Tobacco	1·5		
		1·9	1·6
			12·9
Paper, Printing, and Stationery . . .	5·9	6·6	6·6
Rubber and Miscellaneous Manufactures	2·6	2·8	2·6
Gas, Electricity, and Water	4·4	6·0	6·4
Transport—Manufacturing only . . .	2·7	11·9	2·2
Public Authorities—Manufacturing only	3·1		
		3·4	3·2
			11·8

I have shown the changes which took place in the *relative* output of the principal groups of productive industries between 1924 and 1935. The figures on which the Table is based come from the Census of Production, and are available only for the

three years between the wars when the Census was taken. I have re-expressed the absolute figures of total net output for each industry group as a percentage of the total net output of all the groups included in the Census, which does not cover transport or distribution or commerce or finance, but only mining and manufacturing operations. Thus, whereas the supply of gas, water, and electricity is treated as a branch of production, the figures relating to Transport and Public Authorities refer only to the industrial production carried on by transport and public service undertakings, and not to the services rendered by them. The figures measure, as far as possible, net output at the factory—that is the value of the goods produced, less the value of materials used up in making them. This method of valuation is necessary in order to eliminate duplication where goods pass through the hands of several industries on their way from the raw material to the finishing stage.

It will be seen from this Table that, over the eleven years, the net output of Mining and Quarrying sank from over $13\frac{1}{2}$ per cent. to less than 8 per cent. of the total, and that the Textile Group suffered almost as serious a fall, from over $13\frac{1}{2}$ per cent. to barely over 9 per cent. As against this, Building increased its proportion from under 9 to nearly 11 per cent., and there were sharp rises in the Metal Groups from $20\frac{1}{2}$ to nearly 24 per cent., in the Food, Drink, and Tobacco Groups from $11\frac{1}{2}$ to nearly 13 per cent., and in the Public Utilities Groups from a little over 10 per cent. to nearly 12 per cent.

Broadly, these trends can be expected to continue after the war. The figures, being based on money values, are of course affected by changes in relative prices as well as in volumes of output; but there is no doubt that they present a broadly correct picture of what was happening. I have preferred the figures of money value of output to those showing the changes in the numbers of workers employed, because I am concerned now with the question of industrial building, which depends not only on the numbers employed but also on the degree of mechanization. For example, a modern flour mill is a big building, but, being very highly mechanized, it employs very few workers.

The changes which occurred over the period covered by the

Table were of course influenced by the tariff policy adopted after the crisis of 1931. This undoubtedly stimulated British manufacture for the home market, while it reacted adversely on exports. It was favourable to the iron and steel industry and to a good many branches of engineering; to the food processing trades; and to the chemical industries. It was unfavourable to the textile industries, which depend largely on exports, and to mining, and also to some branches of the clothing industry and to some sections of the metal trades. In general, however, the tariff only accentuated tendencies based on changing market demands—the development of the engineering group of industries and of public utility and service undertakings on the one hand, and on the other, the decline of mining and of the major textile industries, especially cotton.

It should, however, be borne in mind that between the wars, and especially after 1931, British industry was adapting itself to cater to a greater extent for the home market, and to a smaller extent for export markets, than it had done in the past, and that, in face of the loss of income from capital investments overseas during the war, it will be necessary in the future to aim at a large increase in exports in order to pay for indispensable imports of foodstuffs and essential materials. It is therefore necessary to correct the picture of pre-war trends so as to allow for the effects of an attempt to expand exports. This, however, does not mean that we should assume a revival of the same types of exports as British industries sent out into world markets before the decline occurred. It is quite unrealistic to expect, in a number of cases, that the lost markets can be regained in face of the expansion of competitive production elsewhere. India, China, and Japan would not surrender their cotton industries, or Poland its coal-mining, in order to allow British exporters to reoccupy the markets which they have successfully invaded, often with cheaper products than British industries could hope to manufacture, even if the industries involved were thoroughly modernized and conducted with the highest imaginable efficiency. There are industries in which skilled labour accustomed to relatively high standards of living simply cannot compete in mass-production of cheap goods with low-paid labour aided by modern machinery.

We have therefore to consider not what British exports used to be but what they can be under modern conditions of productive technique. It appeared to me that some light could be thrown on the prospects of an expansion of British exports after the war by seeing in what directions they did actually expand in the last pre-war boom. The year 1937 was one of high industrial activity, at least by the standards of the inter-war period, over most of the world. I have, therefore, in a further Table, shown the value of the main groups of British exports in 1937 and in the two preceding years, and also the percentage increase in 1937 over the average of these two years. This rate of increase furnishes a rough-and-ready measure of the expansibility of the demand for the main groups of British exports under the conditions which prevailed just before rearmament set in seriously—though not, of course, before German rearmament had reached a high level.

TABLE XIII

A MEASURE OF THE EXPANSIBILITY OF BRITISH EXPORTS

Values of Exports in 1935, 1936 and 1937, and percentage rise in 1937 over the average of 1935 and 1936

<i>£ millions</i>	1935	1936	1937	<i>Average</i>	<i>Approximate Rise per cent. in 1937 over average of 1935 and 1936</i>
GROUP I.					
Iron and Steel . . .	35.7	35.9	48.4	40.0	35
Machinery	39.2	41.1	49.8	43.4	24
Electrical Goods (except Machinery)	9.5	10.1	12.6	10.7	28
Arms	3.7	3.7	4.5	4.0	22
Vehicles	24.3	26.2	33.0	27.8	31
Ships	3.1	3.6	4.1	3.6	22
Other Metals and Metal Goods	16.3	14.8	18.2	16.4	17
	131.8	135.4	170.6	145.9	28

<i>£ millions</i>	1935	1936	1937	<i>Average</i>	<i>Approximate Rise per cent. in 1937 over average of 1935 and 1936</i>
GROUP II.					
Cotton Goods and Waste	61.3	62.4	69.4	64.4	12
Woollen Goods, Wool and Waste . . .	32.4	33.8	39.9	35.4	20
Other Textile Goods .	12.3	13.7	15.7	13.9	21
Clothing	8.6	9.4	9.9	9.3	10
Leather	3.2	3.6	4.5	3.8	32
	108.9	115.7	129.3	118.0	15
GROUP III.					
Coal and Coke . .	34.6	32.3	41.9	36.3	25
Chemicals	21.4	21.1	24.7	22.4	16
Soap	1.3	1.2	1.4	1.3	12
Vegetable Oils . .	2.3	2.0	2.6	2.3	21
Petroleum	2.4	2.4	3.1	2.6	29
	62.0	59.0	73.7	64.9	22
GROUP IV.					
Paper, Books and Stationery . . .	11.5	11.7	13.4	12.2	16
Rubber Goods . .	1.5	1.6	1.7	1.6	10
Other Manufactures .	10.2	10.5	11.7	10.8	13
China Clay . . .	0.7	0.8	0.9	0.8	20
Horses	0.5	0.7	0.6	0.6	—
	24.4	25.3	28.3	26.0	14
GROUP V.					
Beer and Spirits . .	8.7	12.3	14.2	11.7	35
Tobacco	4.2	4.5	5.0	4.6	15
Sugar	2.7	2.6	2.5	2.6	—
Flour and Biscuits .	1.8	2.0	2.0	1.9	5
Milk Products . . .	0.8	1.0	0.8	0.9	—
Fish	3.7	3.9	3.7	3.8	—
	21.9	26.3	28.2	25.5	17

It will be seen from this Table that, in the last pre-war boom, British exports expanded most in the metal-working group of industries, which showed nearly twice as great an expansion as

the textile and clothing group as a whole. Coal also showed an expansion well above the average, starting from a very low level. In the textile group, the woollen and worsted industries expanded much more than the cotton industry. The clothing industries were distinctly 'sticky'; and the only group to equal the high expansibility of iron and steel was the drink group, aided by the resumption of heavy exports of whisky to the United States.

The general significance of these figures is unmistakable. The expansion of exports in the metal group, taken as a whole, amounted to £37 millions (1937, compared with the average of 1935 and 1936), whereas the textile and clothing group as a whole contributed only £16 millions, and the coal and chemical group £12 millions.

The demand for coal was of course affected by the high level of production in foreign countries, and is likely to remain responsive to this factor after the war, whether or not coal exports are stimulated by reciprocal trade agreements such as existed in the 'thirties with the Scandinavian countries, but more if they are so stimulated than if they are not. Apart from coal and whisky, it is plain from the figures that the greatest expansion took place in exports of capital goods rather than of consumers' goods. The improved demand of consumers' markets overseas was not met mainly by increased purchases from British manufacturers: it was investment in new means of production that showed the largest effects on British exporting industries. I have no room here for a closer examination of the figures; but this conclusion would be confirmed if they were broken up into smaller groups. For example, the only branch of iron and steel exports that failed to show a considerable expansion was domestic hollow-ware; and machinery exports, though they expanded less than exports of iron and steel, showed a substantial increase in nearly all the main groups.

It seems highly probable that these conditions will remain in being, and even be considerably accentuated, when things settle down after the war. This is not likely to be the case immediately after the war, as there will be a temporary famine of many kinds of consumers' goods all over the world, and those countries which are first able to resume production of such goods on a

large scale will have no difficulty in selling all they can spare from their own home markets. But when the immediate post-war emergency is over, it seems likely that the emphasis will be on a wider range of domestic production of cheap consumers' goods within a good many of the economically backward countries, with the consequence that they will be ready purchasers of machinery and equipment, but will not be so ready to spare foreign exchange for increasing purchases of consumers' goods until they have substantially improved their internal economic conditions. Then, indeed, these countries are likely to come into the world market as buyers of quality consumers' goods which they are not equipped to produce at home. But for some time the emphasis will be on purchases of capital goods designed to advance industrialization and to provide better service equipment for their basic agricultural industries. The backward countries will want machinery, electrical plant, transport equipment of many kinds, farm implements, and machines; and the exporting country which best adapts itself to meeting these needs will secure the biggest share in the markets of the post-war world.

Accordingly, as far as the export trades are concerned, the main demand for an expansion of equipment is likely to come more from the industries producing capital goods than from those which produce consumers' goods; and in the latter group the demand will be rather for a modernization of equipment designed to prevent a further loss of markets than for an increased total of productive power. Of course, this demand for the means of modernization may be quite extensive: indeed, it will have to be if total exports are to be expanded to the extent required for balancing Great Britain's international accounts. Cotton goods, despite all the losses of markets since 1914, were still in 1937 much the largest group among British exports; and we can on no account afford to lose what we can contrive to keep by bringing our methods of production up to date. The average age of both buildings and machinery in the Lancashire cotton industry is very high; and the woollen and worsted trades also have many obsolescent buildings and much plant that needs discarding in favour of more modern instruments. Expansion in the supply of buildings for export indus-

tries may have to be concentrated largely on those designed to produce capital goods; but replacements will need to be on a large scale in the consumers' goods industries, which have on the whole many more obsolete or obsolescent buildings and machines.

Export, however, even if it undergoes considerable expansion, as it must do if the requisite supplies are to be paid for, will remain secondary to production for the home market. Now, what was occurring in the home market in the years before 1939 was a rapid increase in the demand for services, accompanied by a greater decline in the proportion of the occupied population engaged in manufacturing processes than was accounted for by the decline in exports. The figures taken from the Census of Production do not directly illustrate this tendency, as the Census does not cover transport, distribution, or other service employments. It is therefore necessary to resort to other sources of information, especially the Population Census of 1931 and the statistics of insured population compiled by the Ministry of Labour.

The broad facts which emerge from a study of changes in the industrial distribution of the occupied population between 1931 and 1939 are, first, that the proportion of occupied persons, including employers and independent workers as well as employed persons, engaged in all forms of manufacturing industry taken together, remained fairly stable, or increased slightly, whereas there was a sharp fall in the proportions engaged in mining and agriculture, and a rapid increase in the proportion engaged in the 'service' occupations, such as distribution, public administration, entertainment, and the professions. Accurate figures are not available; but roughly the 'services', other than transport, increased from 40 to 43 per cent. of the total, transport fell from 7 to 6½ per cent., chiefly on account of staff economies on the railways, and personal service (mainly domestic service) remained almost stable at 12½ per cent. Mining and quarrying fell from 6½ to less than 5 per cent., and agriculture, despite increased production, from 5½ to under 4½ per cent. Gas, electricity, and water services remained about stable at 1¼ per cent.; and manufacture, including building and civil engineering, rose from about 39 to about 40 per cent. This rise, however, was

entirely accounted for by building and civil engineering, which rose from about $5\frac{1}{2}$ to $6\frac{1}{4}$ per cent. If this group is omitted, the manufacturing proportion remained stable: that is to say, the numbers engaged in manufacturing industries increased at the same rate as the occupied population as a whole. As the total occupied population rose between 1931 and 1939 by approximately $8\frac{3}{4}$ per cent., this means that the expansion of the home market under the stimulus given by the tariff and by increasing population more than made up for the loss of exports after 1931, though not, of course, necessarily for the losses incurred before that date.

This stability of the total proportion of occupied persons engaged in manufacturing industries covers up large changes in their distribution between different branches of production. The outstanding changes were, on the one hand, a fall in the proportion occupied in the textile industries from $6\frac{1}{2}$ to 5 per cent., and a rise in the metals group, including engineering, from $11\frac{3}{4}$ to nearly $13\frac{1}{2}$ per cent. Other groups remained relatively stable—that is, increased their numbers at about the average rate for all occupations. Apart from the decline in textiles and the rise in the metal trades there was no sign of marked re-distribution between the main manufacturing groups.

The question is whether these trends are likely to continue after the war. That the service occupations will go on increasing seems practically certain, unless there is so large a contraction in domestic service as to offset the increases in the other groups. Such a fall is quite possible, as an outcome both of the re-distribution of incomes through higher taxation and of the reluctance of women to return to domestic service from factory work, or of new generations to enter domestic service if, under a full employment policy, they are able to find jobs elsewhere. As personal service, including institutional as well as private domestic service, employed in both 1931 and 1939 about $12\frac{1}{2}$ per cent. of the total occupied population, there is obviously room for a considerable contraction if other occupations are in want of female labour. Seven out of every ten workers in personal service were women; and in domestic service by itself the proportion was much higher. It may well be that, even if the other services expand rapidly, the proportion of occupied

persons engaged in all the service groups taken together will not increase. Indeed, it may fall.

Will the tendency to sharp contraction in mining and in agriculture be resumed? Employment in mining has undergone a further fall during the war, accompanied by a rapid increase in mechanization. Even if coal output recovers substantially, the amount of labour employed in the mines is unlikely to regain the pre-war level. It is, however, improbable that it will continue to fall anything like so sharply as it fell between the wars. A full employment policy, at home or abroad, implies an expanding demand for coal, at any rate for some time to come; and it seems unlikely that much will come in this country of projects for burning coal underground, instead of bringing it to the surface—the more so because of the large part played by by-products in earning profits for the owners of the mines. Agricultural output will almost certainly be maintained after the war at a substantially higher level than before, though nobody can yet say how much higher. This, in view of the large economies in man-power introduced both before and during the war, and of the stimulus to their continuance likely to be given by higher agricultural wages, can hardly be expected to carry with it any marked increase in the total numbers engaged in agriculture; but the increase in food production may well be big enough to arrest the fall in agricultural employment.

It looks, then, as if there may be as high a proportion of the total occupied population as before the war available for post-war employment in productive industry. Of these, as we have seen, building and civil engineering will both certainly demand an increased proportion, made up mainly of male workers: so that other industries seem certain to be required to find jobs for fewer men and for more women. Some of these women will come from domestic service, or from those families which would have supplied recruits for domestic service but for the changed conditions.

The manufacturing industries which employed large numbers of women before the war were textiles and clothing, in which, taken together, women made up more than 60 per cent. of the total number engaged. The metal-working trades, which show

by far the greatest tendency to expand, employed before the war only about 13 women to every 87 men. Obviously, there will be a big increase in the proportion of women after the war; for there will be no other source from which the additional labour needed under conditions of full employment can be drawn. This will fit in with the development of mass-production of finished engineering and other metal products, and will encourage the use of such methods and the increased production of goods to which they can be applied.

In the absence of deliberate planning, one would expect under these circumstances a tendency to rapid industrial expansion in the West Midlands round Birmingham and Coventry and in the Greater London area—in other words—a continuance of the pre-war tendencies in this respect. In Greater London, there might be a sufficient reservoir of women, previously either unoccupied or engaged in personal service, who could be drawn into the lighter manufacturing industries; but in the West Midlands the development would speedily come up against a shortage of female labour. Women, except in time of war, are not easily mobile from area to area; and it would be difficult to attract them into the West Midlands on the scale required. Nevertheless, in the absence of planning, the attempt would probably be made, and would place very great obstacles in the way of any full employment policy based on attempting to increase total employment without controlling its character or location. Surplus female labour would be left high and dry in the textile areas, as well as in the areas mainly engaged in the heavy industries, even in face of large shortages in the developing areas. It is plainly desirable, if there is to be a big expansion of women's work in the lighter manufacturing industries, to ensure that the openings shall be as reasonably distributed as possible in relation to the available supplies of such labour in the various districts.

II

Community Building

The location of employment of course determines, to a large extent, the demand for building labour for the erection not only of works and factories but also of houses and buildings of almost

every kind. In many respects, the demand for non-residential buildings other than works and factories is an outcome of residential and industrial development. This, however, is by no means entirely true; for there are certain large classes of buildings of which the supply depends on public policy, and not on the 'law of the market'. If industry and population increase in any area, it will usually not be long before shops, cinemas, and public-houses (unless they are deliberately excluded) are erected near at hand; and office building also follows in most cases automatically upon urban aggregation, though the new offices may be put up mainly in the centre of the town, rather than in the areas in which the development of factories and houses is going on. As against this, the erection of schools, and of public buildings generally, depends much more upon policy, and the provision of community centres and other 'amenity' buildings not designed to yield a profit depends either on public or on private philanthropic enterprise. It was one of the worst features of inter-war housing policy that it was nobody's business to ensure that the tenants in the miles upon miles of streets in new housing estates should have any common centre where they could meet and set about the creation of a sense of local community. Community Centres were established here and there, sometimes on purely voluntary lines and sometimes with aid from the local authorities concerned; and there can be no doubt that, where they were well run, they helped greatly towards the development of a feeling of community and towards breaking down the terrible brick-box isolation which is so common in newly-established settlements. It was, however, nobody's responsibility to ensure that such centres should be built, or that there should be proper provision for games or club activities. In post-war housing schemes, community buildings, playing fields and parks ought clearly to be included as part of the original plans.

It is equally evident that the need for community buildings is at least as great, if not even greater, in the older built-up areas. The dwellers in the new suburbs have at least light and air and more space than most of them have been used to: the dwellers in old, crowded urban areas lack most of the ingredients of physical amenity, even if their very congestion often creates in

them a stronger sense of neighbourhood and a greater willingness to help one another in time of need. Post-war building plans should include provision for community centres and other civic buildings, not only on new housing estates, but also to serve the older urban neighbourhood groups, which often retain a vigorous life even where they receive no sort of recognition in the structure of local government. Moreover, the village as well as the town needs its community centre. It is often said that the village inn serves this purpose; but this is very seldom really the case. The village inn has its habitués; but they fall a long way short of being the whole village, or even all the men. The inn is more often the centre for a group of cronies than a real meeting-place for the village as a whole. That is one reason why Women's Institutes have met with so much success; but the Women's Institute usually fares best where it is not housed in a separate building, but is one of a group of institutions centred upon a good-sized, well-equipped Village Hall, with enough rooms of different sizes to accommodate a number of activities and not to need to turn out everybody else whenever it is desired to hold a dance. I know that much has been done, with aid from the National Council of Social Service, in building Village Halls; but the great majority even of sizeable villages are still without them, and many of the Halls that have been built are much too ill-provided effectively to meet the need.

What I am urging is that we should include in our post-war building plans a definite provision for equipping every urban area, central or suburban, and every village above a certain size—say, in the first instance, 500 inhabitants within a certain radius—with a well-designed community building of some sort, surrounded wherever possible by open land for play and recreation, and including, in all areas above a certain population, a Communal Restaurant where simple meals can be got at reasonable prices, and where people can entertain their friends, or meet their neighbours socially, and so relieve housewives from many burdens and help to break down the isolation which is so marked a feature of modern ways of living. The State is the right body to assume the responsibility for doing these things; for standardization of design and equipment can reduce the cost

of doing them to easily manageable proportions. I should like to see the teams that have been at work devising standardized plans for the building and equipment of temporary dwellings turned on to this job next, in close consultation both with those who have been responsible for building and equipping war-time canteens and camps and with the organizations most closely in touch with village life and with the work of Settlements and Community Centres in the towns.

In the well-known Village College at Impington, an attempt has been made to provide a single group of buildings designed to serve the combined purposes of a Senior School, a centre for adult education, and a Community Centre for a group of villages. There is much to be said in favour of such a combination, on condition that adequate space is allowed for each group of activities and that no one is made subordinate to the others, and also that the erection of such a centre in a large village is not used as an excuse for doing nothing in the smaller villages near by. These need their Village Halls none the less because they radiate round a larger centre; indeed, it is important to take precautions to prevent the life of the smaller villages from being drained away by their bigger neighbours. Every village of any substantial size needs its own centre; and it would be no great matter, as part of a comprehensive national scheme, to provide for them all.

III

Educational Building

Village Halls and Community Centres for town and country ought to be built; but the Government is not yet committed to building them. It is, however, fully committed to an extensive programme of school-building, destined to be spread over a considerable number of years, but demanding immediate action on a large scale, if the Education Act of 1944 is to be more than a pretence. In order to make the promise of universal secondary education a reality, it will be necessary both to build a large number of new schools and to carry out big improvements in the buildings and equipment of existing senior schools which are to be enrolled for use in secondary education. At the same time, the promised Young People's Colleges will have to be

built, and there will have to be a great improvement in the buildings and equipment of Technical Schools and Colleges. Universities and Teachers' Training Colleges, or Colleges incorporating them in new Universities primarily for civic education, will have to be enabled to receive much larger numbers of students; and at the other end of the educational scale there will have to be a very great replacement of obsolete buildings now used as infant or junior schools, and a considerable change in ideas about the appropriate design and minimum requirements of such schools. The standards of accommodation which have hitherto been tolerated both in village schools and in slum schools in the towns are almost incredibly low; and in a great many cases the existing buildings are so cramped on their sites that there can be no question of re-building them where they stand.

The amount of educational building that will be needed as soon as possible after the war is very large. But it is fortunately neither necessary nor desirable that most educational buildings shall be heavily constructed, so as to last for a long time. For most types of school there is a great deal to be said in favour of light forms of construction, which lend themselves readily to standardized methods of supply.

At pre-war standards for different types of school, building costs, apart from non-building equipment, differed very widely. Primary school building cost on the average about £44 for each 'school place'; senior school building under the elementary code about £62; and secondary school building about £94 per place. After the war, secondary school standards will become applicable to all children over eleven years of age, and will therefore apply to practically all the new building called for under the Education Act. New primary and infant schools will be needed mainly to replace existing schools at a higher standard of accommodation and amenity. Relative costs for primary schools will therefore tend to rise: they were much too low before the war to yield a satisfactory standard. What post-war school building will actually cost no one can say; for the general level of post-war building costs and the practicable economies of standardization and lighter construction are both unknown. All we can do is to get some idea of the physical

magnitude of the task to be faced, and of the call which it is likely to make on the services of the building industry.

In 1939 we were in the middle of carrying through the re-organization of our school system to fit in with the requirements of the Hadow Report. This applied principally to the establishment of new senior schools which will now be transformed into secondary schools under the terms of the 1944 Act. The completion of this pre-war programme required in 1939, in England and Wales, the provision of well over 400,000 further school places. A reduction of excessively large classes to a maximum of 40—obviously much too large a number for satisfactory teaching—would have meant about 260,000 further additional places. Moreover, the need in 1939 for replacement of hopelessly obsolete school buildings certainly cannot be put at less than the equivalent of 600,000 places; and it would be easy to scale this total up a great deal further. We have thus a need for well over a million and a quarter school places to be covered by new building, altogether apart from any extension of the need as an outcome of the 1944 Act.

It may be urged that these estimates take no account of the fall in juvenile population since 1939, or of the further fall that is to be expected. This is strictly true; but account is taken indirectly of this factor, by setting the permitted maximum for a class as high as 40. The fall in child population should be used as a means of reducing further the size of classes, and of increasing the amount of accommodation allowed for each school place. Smaller classes and more teaching accommodation are among the most necessary of all educational reforms. I therefore leave the figures as they stand.

Under the Act we have first to provide for schooling up to 15 of all children. This involves about 320,000 additional places. We have next to provide, in Young People's Colleges or elsewhere, for the accommodation of all young persons between 15 and 18 for one day a week. This, on the most economical assumptions about full utilization of the space throughout the week, will call for another 310,000 places. When the leaving age goes to 16, as is foreshadowed in the Act without the fixing of a definite date, there will arise a need for about 460,000 additional places in secondary schools, partly offset by a

fall of about 90,000 in the places needed in the Young People's Colleges. Furthermore, if and when the time spent in the Young People's Colleges is advanced from one day a week to three, there will arise an additional need for about 670,000 places, if the full-time leaving age remains at 15, or for about 460,000, if it has been raised by then to 16.

These estimates are for England and Wales, and do not include Scotland. In order to cover Great Britain as a whole, they need scaling up by the appropriate fractions. If this is done on a crude population basis, it is necessary to add about 175,000 places, apart from any increase in the leaving age, about 45,000 for raising the leaving age to 15, about 25,000 for one-day attendance at Young People's Colleges, about 65,000 for raising the age to 16 (less about 10,000 fewer places in Young People's Colleges), and about 50,000 for putting continued education on a half-time basis from 15 to 18 (or, say, 30,000 from 16 to 18).

How large a labour force would these developments of school-building require? About 200,000 men, working for a full year, could easily carry out the entire programme of 'Hadow' reorganization, of reducing classes to a maximum of 40, and of replacing obsolete school buildings on the scale assumed. About 90,000 persons, working for a year, could do what is needed in connection with the raising of the school age to 15, and another 85,000 or thereabouts could provide buildings for Young People's Colleges on the basis of attendance for one day a week. Another 130,000, again working for a year, could enable the leaving age to be raised to 16, and another 50,000 to 60,000 could provide Young People's Colleges on the scale requisite for half-time attendance. This gives a total of rather more than 500,000 man-years: so that, if the entire programme were spread over five years, the demand would be for only 100,000 workers, and, if it were spread over ten years, for only 50,000. To this must be added something for extensions of Technical Colleges, Teachers' Training Colleges, Adult Residential Colleges and Adult Education Institutes, and Universities. Suppose we guess these requirements at 100,000 man-years, the total goes up to 120,000 for a five years' programme, or 60,000 for one of ten years. Not very formidable totals, were it not that the building industry will be subject to heavy pressure in meeting other de-

mands. The great difficulty will lie, not in carrying through such a programme over ten years, but in getting done quickly during the period immediately after the war what is indispensable in order to give effect to the minimum requirements of the Education Act in the fields of secondary education and training of teachers. It is to be feared that the necessary reforms in primary education will for the most part have to wait until these urgent claims have been met, and until a beginning has been made with overtaking serious arrears in technical and university education. This is not because the needs of the primary schools are really less urgent; for they are not. It is because the Education Act has to be put into force if entire disillusionment is to be avoided, and because the primary school problem is so large as to be particularly difficult to tackle at once.

When I say that for the most part the primary schools are likely to be kept waiting until these other needs have been met, I do not mean precisely what I say. I mean that they will almost certainly be kept waiting for satisfactory *permanent* buildings. But, just as the Government is proposing to put up temporary houses because it is not possible to build quickly enough on a permanent basis, it would be fully practicable to devise a plan for *temporary* school buildings for the purpose of meeting the emergency in the primary schools. Such a project would have many advantages. It would allow wide room for experiment in new types and combinations of school design: it would be better than attempts to extend existing buildings which are on unsatisfactory sites and ought to be demolished as obsolete; and it could easily be developed into, or combined with, arrangements for country Camp Schools for town children over part of the year. Only if some such plan as this is accepted can the primary school teachers be expected to acquiesce in the spreading of plans for meeting their permanent needs over a considerable period of years. Of course, I am contemplating that the permanent programme would not be in any way scaled down on account of these temporary measures. The temporary school buildings, like the temporary houses, would be *extra numerum*: they would not be regarded as making any contribution towards meeting the long-term needs.

Agricultural Building and Conclusions

The final group of building demands that I need discuss in this chapter is that which arises from the needs of agriculture. It is generally recognized that, as matters stand now, a very high proportion of all farms are seriously under-capitalized. There are great numbers of old farm buildings, which have been cheaply patched up again and again. Few farms are adequately equipped with barns, sheds, byres, storage-accommodation, concreted yards, milking facilities, silos—and so on through the entire range of permanent farm 'improvements', not excluding proper living accommodation. How much we shall need to spend on providing these things will of course depend on the nature of our post-war agricultural policy; but even if we set ourselves no higher standard than the maintenance of our pre-war agricultural population under conditions which will yield higher living standards as the return for higher productive efficiency, the necessary capital expenditure will be large, and a substantial fraction of it will be expenditure on farm buildings. I know no way of forming any sort of statistically based estimate of what will need to be done. But I am inclined to suggest that an allocation of 30,000 building workers over a period of ten years (it would be unfruitful to look further ahead) would be more likely to be too small than too large. It is, of course, not meant to cover rural cottage-building, which has been provided for elsewhere.

If the land remains in private ownership, there will be serious obstacles in the way of any such programme. The landlords certainly will not, and in many cases cannot, provide the money. The farmers will be able to provide some of it, but must be safeguarded fully against the value of the improvements accruing to the landlords in higher rents. The State is the most appropriate body to supply most of the capital; and could easily do so if it were the owner of the land. If it finds the capital, leaving the land in private ownership, there will again be grave danger of making an unmerited present to the landlords.

It is extraordinarily difficult to draw the threads of this chapter

together into any general estimate of the probable or desirable post-war demand for buildings other than houses. The entire outlook is so dependent on policies which are as yet undetermined that no forecast can be more than an expression of personal judgment about what ought to be done. Even the demand for educational building, which is broadly determined by plans already formulated and approved by Parliament, can be made to look very different by spreading the execution of these plans over a longer or shorter period. In dealing with the demand for houses, it is possible to start out from known facts about the trends of population and to form reasonably accurate estimates of the number of families likely to need homes. But in relation to almost every other type of building not facts, but policies, are the essential determinants.

All that can be said with confidence is that, for almost every kind of building, there will be a long queue of claimants waiting at the end of the war, and that, in the short run, the problem to be settled will be necessarily one of priorities among claimants all of whom will have powerful arguments on their side. The demand for houses will be clamorous; but houses cannot be built in the right places unless factories and other places of employment, schools and other public buildings, and the constructions needed for public utility services are erected as well. Arrears of repairs and maintenance will have to be made good quickly, if serious further deterioration is to be avoided; and re-planning will be grossly prejudiced, if it has to be held up during the period when industry and population are re-sorting themselves in relation to immediate opportunities at the end of the war. The demand will be insistent: so that it will be desirable to execute much more than one-tenth of any reasonable ten years' programme during the earlier years. On the other hand, the building industry will start with a seriously depleted labour force, and it will take time to bring it up to whatever level is decided upon as desirable in the light of the total building need. Thus, during the first few post-war years, demand will be high and supply low. Under these conditions, if the rival claimants are allowed to scramble for priorities, the results will be disastrous; for the longest purses, and not the neediest suppliants, will have their demands met. In order to

avoid this, there will have to be a strict system of control operated either by means of a direct system of licensing of building work, or indirectly by means of a rationing of materials or even of labour. With this will have to go an effective control over prices; for otherwise it will become easy both for builders and for the suppliers of builders' requisites to force up prices to unreasonable levels.

The total demand for buildings would not be unmanageable if it could be spread evenly by the fiat of a directing authority over a period of ten or a dozen years, and if the industry could be organized to meet this steady demand at an even rate. But the time which will inevitably be needed for bringing the industry's productive power up to any level that can be regarded as adequate will mean that, for some time after the end of hostilities, even projects which possess a high degree of urgency will have to be postponed, for sheer lack of the means of putting them simultaneously into execution.

In general, it will be easier to postpone non-residential than residential building. Industries are likely, for some time after the war, to find ready markets for their products even if their efficiency is not high. The real testing time for industry will come only when the post-war replacement boom has spent its force, and British producers find themselves in competition with foreign producers who have been able to get back to an efficient basis. It will therefore be possible to concentrate labour on urgent repairs, and then to turn it over to new construction in time to play its part in the long-term re-equipment of British industry. This, however, will be practicable only if the task of overtaking arrears of repair and maintenance work is tackled with energy the moment the war ends, and if the plans for turning over from repairs to industrial building are laid well in advance, so that the change can be made, when the time comes, with the minimum of friction and delay.

All things considered, it is plain that, to whatever level we may succeed in raising the labour force of the building industry during the three or four years immediately after the termination of hostilities in Europe, there will be for at least a dozen years from the beginning of the post-war plan no dearth of desirable projects to which, when the most urgent tasks have been tackled,

we can turn over any surplus of workers who can be spared from house-building. In the long run, we may be faced with the need to scale down the labour force attached to the building industry from the high level to which it will be necessary to raise it for coping with post-war needs. But this situation will not arise for at least a dozen years, or, probably, for some time after that. Accordingly, there should be no difficulty in the way of offering to those in the industry sufficient guarantees that, if they are prepared to deliver the goods without abusing their position of vantage to exploit the public, continuous employment can be made available not only for them, but in addition for all the new recruits who will have to be brought in and trained to cope with the emergency demand.

CHAPTER VIII

WAR FACTORIES AND THE ESTABLISHMENT OF NEW TOWNS

Is our post-war building programme in Great Britain to include the construction not merely of new houses, but of new towns? It has been widely suggested that it should, and, in particular, that we should set out to develop some of the great war factories, which have been built with Government money and to serve public needs, as the centres of new industrial development for the purposes of post-war production. Many of the largest of these factories are at present operated as well as owned by the Government, and others are operated as 'agency' factories by private firms on the Government's behalf. Their construction has involved not only the provision and equipment of factory buildings on a very large scale, but also extensive civil engineering developments for the supply of power, water, and facilities for transport; and in connection with them numerous hostels and other auxiliary buildings, as well as a number of houses, have been put up.

What is to become of these huge establishments after the war? It will be a colossal waste of capital and opportunity if they are merely dismantled and allowed to go out of use. They will not, for the most part, be needed in the post-war period for the continued production of the kinds of goods they have been built to supply; and to a considerable extent their plant will be unadaptable to peace-time uses. Nor is it probable that in most cases there will be private firms willing to take over these vast undertakings and adapt them to other kinds of manufacture, even where their buildings and their service equipment have been excellently planned and may still be thoroughly up to date when peace returns. They are, indeed, in most instances much too big for there to be much chance of their remaining in use as single factories.

It is often argued that the great war factories will be good for nothing after the war because many of their buildings are

quite unsuitable for normal production. In some cases the workshops are mainly underground, and in a number of others, where explosives are being handled on a large scale, the type of building is ill-adapted to any ordinary factory processes. This is quite true; and I am not suggesting that the vast explosives factories can be used as factories when the war is over. Many of the Royal Ordnance Factories, if they are to be used at all, can be developed only as sites on which demolition will be followed by new building of the types needed for post-war production. Yet even these factories have often large administrative blocks, substantial engineering shops, and other buildings which could be turned to peace-time employment, as well as railway sidings and service roads, water and power supply installations, and other equipment which it will be very wasteful merely to demolish unless we are certain that they cannot be put to economic use. Moreover, even if many of the R.O.F.s are unsuitable except as sites, and if some of them must be ruled out as inconveniently located for normal industry, the same obstacles do not apply in most instances to the 'agency' factories and 'shadow' factories built for the Government by private firms and conducted under the management of these firms for the execution of Government contracts. Many of these 'agency' and 'shadow' factories are excellently equipped for standardized mass-production, and could be adapted without much difficulty to the manufacture of commodities or components which will be needed in large quantities after the war.

We have, then, to consider two separate types of war factory—the factories set up for the manufacture of explosives or for shell-filling or similar types of work, and the engineering and aircraft factories set up for the mass-production of standardized weapons of war or, as 'shadow' factories, in order to duplicate the engineering plants of private firms on the Government's contract list. Factories belonging to the first of these two groups have to be considered mainly as possible sites for new industrial development. Many, though not all, of their buildings will have to be demolished whether they are made use of or not. The question is whether, as sites already well equipped with transport facilities, power and water, and with central administrative buildings and good estate roads, they are suitable to be

made the basis of new Industrial Trading Estates or of new towns. Obviously, some of them, situated for reasons of security in remote areas, will be dismissed as unsuitable and will be scheduled for demolition and for the return of the land, where its productive power can be restored at reasonable cost, to agricultural use. But there may well be others which will pass the tests of suitability, and become excellent nuclei for new Industrial Trading Estates of a type similar to those which were set up in certain of the depressed areas before 1939—for example, on Clydeside, on the North-East Coast, and in South Wales.

The 'shadow' and 'agency' factories stand mostly in a somewhat different position. Many of them are situated in or near existing industrial areas, or in small towns to which they have brought a large amount of new employment, often of a kind not carried on in the neighbourhood before. They are, moreover, in most cases much smaller than the big R.O.F.s engaged in the making of explosives or the filling of shells and bombs; and many of them are capable of being carried on after the war as single factories either by the firms responsible for their erection and management or by other firms, or by the Government itself. It is not known into what commitments the Government has entered to give the operating firms an option to purchase or rent these factories at the end of the war. Probably such options do exist; and the terms on which it is proposed to dispose of them will need careful watching in order to ensure that a proper price is paid. There is all too much danger that private firms, doubtful of the expansion of the market, will be eager to see these factories scrapped rather than run any risk of seeing them handed over to competitors or run by the Government itself. They may be willing to buy them at or near scrap prices, and then to consider whether to retain them in preference to their own older factories or dismantle them in order to limit competition—as Shipbuilders' Security bought up shipyards and destroyed them before the war. They may, of course, in some cases be ready to take them over at fair prices and retain them in production in addition to their own pre-war establishments, where they believe post-war markets will offer sufficiently attractive openings; but the restrictive record of British capitalism in the inter-war period makes it difficult to believe that this

will happen in the majority of cases, unless special steps are taken to ensure that it does happen.

Let us leave aside for the moment the problem of the 'agency' factories, except the few which are comparable in size with the larger R.O.F.s; and let us ask what will need to be done where there is a good case for regarding a great war factory as suitable, on grounds of location and of general lay-out and service equipment, to be developed as the centre of an Industrial Trading Estate with a new town based largely upon it, as Slough, in its modern development, has been based on the Slough Trading Estate, which inherited the equipment of the great depot built up there during the First World War. Evidently, no such development will be practicable unless extensive programmes of house-building and other forms of civic construction are carried out on the selected sites; for a large proportion of the workers at present employed in these establishments are being forced to travel long distances to and from work. Such travelling, which has to be endured under war conditions, would be intolerable in normal times. If the great Royal Ordnance Factories and 'agency' factories are to continue in use after the war, it will be necessary to build up in their immediate neighbourhood what will be in effect large new towns. As an example of the scale which such building might assume it may be mentioned that a single great Ordnance Factory, which has done much to remove the burden of surplus labour from the distressed areas of East Glamorgan, has been planned to employ more workers than were employed before the war in all the industries of Oxford, a city of 100,000 people.

The creation of new towns based on the great war factories fits in admirably with projects, which are being widely discussed to-day, for the removal of a part of the congested population of our older towns, and especially for the prevention of the re-building of pre-war slum areas on their old, unsatisfactory sites. It also fits in with the need to re-distribute population out of areas which have been for a long time continuously depressed, and seem unlikely to recover after the war to the extent necessary to provide balanced employment for anything like the whole of their pre-war supply of workers. A few years before the war Political and Economic Planning produced a proposal

for the complete removal of the town of Merthyr Tydfil and its re-building on a new site. One great Ordnance Factory in South Wales has in fact gone a considerable way towards achieving this, except that it has not provided houses or civic amenities for the large body of workers for whom it has found employment in the new area. It is obvious wisdom not to throw away what has been achieved under the stress of war, but rather to complete what has been begun by creating a town where there is now only a colossal industrial establishment.

It is necessary at this point to draw a further distinction. Some of the great war factories are situated well away from existing industrial centres, so that their development as Industrial Trading Estates would mean in effect the creation of entirely new towns. Others, however, are situated within a few miles of existing centres of industry, so that it would be rather a matter of moving production out of the old congested urban area to a new location, and thereafter of transferring populations gradually from the old to the neighbourhood of the new producing areas, which could be properly zoned for industrial and residential development. It might even happen that large numbers of those who came to work in the new town would continue permanently to reside in the old, and that some who came to live in the new town would continue to work in the old. The new area would then be constructed as a satellite, rather than as a quite independent new town, unless it were deemed best over a period of years entirely to demolish the old town and transfer the whole of its industry and population to the new planned site.

Evidently, where geographical conditions permit, the construction of a satellite town based on a big war factory is likely to be very much easier than the creation of an entirely new independent town. In some instances, it may even be preferable to allocate the war factory site preponderantly to housing rather than to industrial development, and to re-build most of the factories in the old urban area, as it is thinned out by slum clearance and re-planning. The best policy cannot be settled *a priori*: it must depend on the local conditions. Probably, in most cases, a beginning can best be made with mixed forms of development of housing and industrial areas, carefully zoned, and

it can be decided later, in the light of practical experience, how far each form of development can be pushed with the greatest advantage to the life of the linked communities. Where a new settlement is to be linked in this way to an existing town, it is clearly essential to plan the two together, as parts of a single community needing to work out for itself a properly balanced scheme of growth; and this raises important problems of local government in view of the inadequacy of the existing areas over which town and country planning is applied. Even more complicated problems will arise where the new satellite is designed to serve more than one existing town from which the great war factory has drawn its labour; for in such cases two or more old centres of industry will have to be associated with the development of the new area of settlement.

Where new towns and Industrial Trading Estates are created as satellites, they will tend primarily to develop branches of production previously carried on in the towns to which they are attached. Thus, if a satellite town were to be established near Stoke-on-Trent, it would tend to become a centre for potteries moved out from the old industrial area of the Five Towns, in the same way as Wedgwoods were engaged in moving out just before the war. Where the old town, or towns, lacked a proper balance of industries, or depended largely on declining trades, it would be necessary to plan carefully the introduction of new industries capable of giving a better balance and of affording adequate openings for additional employment; but in most cases the general pattern would be determined by the character of the existing local industries, which would be only supplemented where necessary, and not replaced. As against this, where what was in hand amounted to the establishment of an entirely new town, the complete pattern of its industries would need to be designed from the start, at any rate in outline. This does not of course mean that it would have to be settled ahead in detail exactly what factories were to be set up; but a reasonable nucleus would have to be deliberately planned for, even though other entrepreneurs would be left with full freedom to establish further factories of types suitable to the general plan of development.

It will be asked what types of production are to be carried

on in such cases—where a great war factory is taken over, and used as the nucleus for the planned development of a brand-new town based on an Industrial Trading Estate. The answer is twofold. In the first place, it will be both possible and desirable to deter businesses which have been closed down during the war from returning in all cases to their old locations, or even to the towns or areas in which they were previously carried on. When the businesses which normally produce consumers' goods for the home market, or consumers' or producers' goods for export, but have been shut down or diverted to other forms of production during the war, are in a position to start up again, it will be practicable to effect large changes in their location—changes which could have been brought about, if at all, only with much greater difficulty in time of peace. It should be a cardinal point of national policy to induce a considerable number of such factories to settle down in new locations—above all, where they are of such a kind as to bring a desirable element of balance into the areas in which they are induced to settle. For example, before the war certain regions, of which South Wales was one, were notably short of light industries capable of employing a considerable proportion of female labour; and it would be much to the national advantage to establish such industries in these areas.

The second type of opportunity will arise out of the need for the very considerable programme of manufacture of requisites for building, especially of houses, and of furnishing and equipment for houses, that will have to be developed quickly during the period of reconstruction. It seems certain that this building programme will require extensive measures of pre-fabrication—that is, of manufacturing standardized components for buildings under mass-production conditions in specially equipped factories. Furniture and house-equipment will also need to be mass-produced in very large quantities. These needs will provide an admirable opportunity for setting up on the proposed Industrial Trading Estates based on the great Ordnance Factories a substantial nucleus of peace-time factories, which will be in a position to provide full employment as fast as they can be equipped, and to maintain this level of employment at any rate for a number of years.

From the standpoint of their contribution to the employment of the populations to be settled in these new towns, it is immaterial whether these factories designed to play their part in the post-war building programme are to be publicly or privately owned. Let us assume that, in any case, the bulk of the other establishments which are induced to settle on the proposed Estates will be conducted by private enterprise. It will be practicable for the Government to induce business men to take advantage of the opportunities offered on the Estates by enabling them to rent factory space with services all ready for use, and thus to make a new start with much less capital than they would need to raise if they had to build and equip brand-new factories entirely at their own expense. This should be a very powerful inducement at a time when there is certain to be a considerable shortage of capital for new industrial development, and when the processes of investment will probably have to be kept under fairly stringent public control. Moreover, if there is in force a policy of control over the location of industry, on the lines advocated in a previous chapter, the State will be in a position to offer inducements to business men to settle in or near the Industrial Trading Estates established under its auspices; and if large use is made of the converted war factories for mass-production of building requisites, a number of firms manufacturing components and fittings will probably be attracted to settle down close to them, in order to act as suppliers and sub-contractors.

I am assuming that, even if many of the factories which are set up on the proposed Estates are privately run, the Estates themselves will be retained under public ownership and will be managed as public concerns, and that the services of water and power supply will be similarly administered. This will be essential in order to secure co-ordinated development of industries and housing, and to make practicable the creation of well-planned and well-balanced communities capable of growing up to the stature of independent towns.

It can be taken as practically certain that the form of development advocated in this chapter will not come about unless it is deliberately instituted as a matter of national policy. 'Private enterprise', left to itself, will probably be disposed for

the most part to welcome the abandonment of the war factories as clearing formidable potential competitors out of its way, and will tend to be quite regardless of the destruction of public capital which such an abandonment would involve. Moreover, the post-war development of some of the great war factories will be quite impracticable unless new towns, equipped with the requisite civic services and amenities, are built promptly in their immediate neighbourhoods. Such towns cannot in practice be built either by private enterprise or by the kinds of public housing enterprise which existed before the war. Local authorities of the existing types are not in a position to build new or even, save very exceptionally, satellite towns: they are led almost irresistibly to build suburbs immediately around their existing built-up areas. Further experiments in new town building by public utility companies on the lines of Letchworth and Welwyn will be impracticable during the period of reconstruction, owing to the sheer impossibility of raising the requisite capital on a purely private basis. Even before the war the development of these two new towns was most seriously delayed and hampered by shortage and high cost of capital; and the situation in this respect is certain to be much more unfavourable after the war.

The plain fact is that, if we are to build new towns as a part of our coming reconstruction programme, the job will have to be done under national auspices and with capital supplied at rates of interest which only the State can command. Private enterprise, in the shape of private building and civil engineering contractors, may be called upon to do the actual work of construction; but the State will need to pay the piper—and to call the tune. What is the best way of organizing this key part of the work of physical reconstruction? The aim, I assume, will be to create new towns, or cities, which will in due course become as fully self-governing as Manchester or Glasgow. But there will have to be an intervening stage between the decision to build and the arrival of the new communities at a condition of readiness for self-government. Surely the machinery needed for carrying out this vital work of city-making is, first, some sort of national planning authority which can both decide what sites are to be chosen for development and set up the requisite

organization for executing the approved plan, and secondly, a special body entrusted with the task of building and equipping the city and therewith of governing it until it is ready to take over the work of governing itself. This second need can probably best be met by appointing, for each area in which civic development is to take place, a body of full-time Commissioners, responsible to the national planning authority and in close touch with the existing local authorities in the area, and also with the business, labour, cultural, and other groups chiefly representative of local interests and points of view. These Commissioners should hold office only for a limited number of years, and should then hand over their powers to elected local authorities representing the populations of the 'colonies' they had brought into being.

This, surely, if we are planning for new ways in civic construction and for a re-distribution of workers and of employment away from the old, congested urban areas, is the sensible method of setting about the task. It requires, in the first instance, the establishment of a national planning authority with power to decide where the new cities are to be, and to set up the local agencies for supervising their birth. It requires that the State shall assume the final financial responsibility, in order that the proposed Commissioners may be in a position to raise capital at the lowest possible rate of interest. It requires that the State shall adopt a definite policy of influencing and controlling the post-war location of industry. But is there anyone left who seriously doubts the necessity of the State doing all these things? Moreover, is there any better way both of ensuring a prompt turnover from war to peace production, and of reducing to a minimum the dislocation attending the demobilization of the war factories, and preventing a return to mass-unemployment in the areas of pre-war distress? Here is the opportunity, if we will take advantage of it, for a solid contribution to the practical art of planning, and a hope that post-war building may not repeat the formless muddle of the pre-war building boom.

CHAPTER IX

APPRENTICESHIP AND TRAINING

I

The Pre-War Position

THERE has been much debate about the measures which need to be adopted by the building industry in order to equip itself with a labour force adequate to the tasks which will fall upon it after the war. This question has two aspects: there is, first, the necessity for an improvement in the methods whereby the industry recruits and trains the juveniles who enter it with the prospect of becoming skilled craftsmen—in other words, the problem of apprenticeship in a somewhat wide sense of the term, covering both apprenticeship under written indentures and the less formal ways of entering a skilled trade; and there is also the evident necessity of supplementing the normal methods of recruitment for a period after the war by arrangements for special training of adults, including men released from the Forces. In between these two main parts of the problem lie the smaller, but still important, questions of providing for the completion of apprenticeships interrupted by war service, or broken off for other reasons on account of the war, and of establishing special courses for the rehabilitation of partially disabled men who can by proper treatment be enabled to resume, or to take up, work in the building industry.

All these problems have already received a good deal of consideration; and on some of them definite decisions have already been made. The Government has promised that adequate provision will be made for the training of disabled men, not only for building work, but under a general scheme applicable to all suitable employments.¹ The bare outline of a plan of emergency training designed to raise the total labour force of

¹ *Report of the Interdepartmental Committee on the Rehabilitation and Resettlement of Disabled Persons* (1943, Cmd. 6415), and *Disabled Persons (Employment) Act, 1944*.

the building industry over a period of years to a maximum of a million and a quarter has been published in a White Paper,¹ which was based on more ambitious proposals put forward in a Report prepared by the Central Council for Works and Buildings²—an advisory body representing employers, operatives and Government departments and attached to the Ministry of Works and Buildings. For dealing with the longer-run problems of normal apprenticeship and training another body, the Building Apprenticeship and Training Council, has been set up by the Government with representatives from all sections of the industry, including architects, and from the Government departments concerned; and, almost simultaneously, the Federations of employers and operatives have entered into a new National Apprenticeship Agreement. The Apprenticeship and Training Council has already issued a first Report,³ in which it reviews the requirements of the industry, and puts forward a number of immediate proposals. Finally, the question of interrupted apprenticeships has been under discussion, both directly between the two Federations and by the Central Council for Works and Buildings; and the Board of Education has been attempting to expand the immediate facilities for courses in building subjects in Technical Colleges and Institutions, and has also been preparing larger plans for expansion after the war.

Thus, there can be no complaint that the questions involved in increasing the labour force of the building industry after the war are not being, at least, actively discussed. It may rather be questioned whether too many cooks may not be in danger of spoiling the broth. There are difficult questions of official responsibility between the Board of Education, which controls technical education, the Ministry of Labour, which regards itself as responsible for schemes of training both for disabled men and for able-bodied men who are to be instructed in new skills, and the Ministry of Works and Buildings, which has a somewhat loosely defined responsibility for Government dealings with the building industry. It is not easy to see how the National Apprenticeship Agreement drawn up by the two Federations

¹ *Training for the Building Industry* (Cmd. 6428, 1943, 1d.).

² *Report on Training for the Building Industry* (H.M.S.O., 1943, 1/-).

³ *Building Training and Apprenticeship Council, First Report* (December 1943).

and the scheme issued by the Building Apprenticeship and Training Council are meant to fit together. Nor is it at all clear what are to be the respective parts of Technical Colleges under the Board of Education and Training Centres under the Ministry of Labour in post-war schemes of emergency training. Possibly all these problems will solve themselves satisfactorily when the time comes; but there is certainly room for a good deal of confusion and waste of effort unless all those concerned are prepared for a large amount of give and take.

The Government White Paper of 1943 provides, as we have seen, for raising the total force of the building industry over a period of years to a maximum of a million and a quarter. Unfortunately, it is not made at all clear either that this maximum is a definite target at which it is proposed to aim, or whether the training arrangements outlined in the White Paper are meant to cover the requirements of the civil engineering industry for skilled craftsmen as well as those of the building industry proper. Even apart from this latter doubt, the proposals made in the White Paper appear to fall a good way short of what was advocated in the Report of the Central Council for Works and Buildings, on which the White Paper was supposed to be based. They appear indeed to be most unlikely to yield a total labour supply of anything like a million and a quarter, unless there is to be a substantial fall in the proportion of skilled craftsmen to unskilled workers in the industry as a whole. The most that can be said for the White Paper is that the Government has at least promised to take *some* action, and has not altogether shelved this, as it has so many other, key problems of reconstruction.

Disquietude is increased when we turn from the proposals of the White Paper to what is put forward in the first Report of the new Building Apprenticeship and Training Council. For this body, representing Government departments as well as the industry, is apparently content to plan for a building labour force consisting of 500,000 craftsmen, with an entry of from 15,000 to 20,000 apprentices a year to meet normal wastage. It is added that it will be all to the good if recruitment of apprentices can exceed wastage, as this 'will save the necessity of taking

partially trained adults into the industry for carrying out the post-war programme.' This sounds as if the members of the new Council were thinking in terms of an industry, not of a million and a half or even a million and a quarter, but not greatly exceeding a million, or, in other words, no larger than the industry of pre-war days. Perhaps this is not what they mean, and they really intend their million to be supplemented by enough special trainees to bring the total up to a million and a quarter or a million and a half. But they have not said so; and, as we shall see, the White Paper itself is very vague about the point to which it is really meant to carry the expansion.

I think I have made it sufficiently plain in previous chapters that, whatever is done now, the building industry will inevitably be mal-equipped in the period just after the war for carrying out even the more urgent of the tasks before it. It has shrunk very greatly under war conditions, as it was bound to do in face of the demands of the armed forces. This shrinkage has been limited by the requirements of war factory, camp and aerodrome construction and to a smaller extent by the necessity of house- and hostel-building in the neighbourhood of many of the great war factories. But it has been very considerable; and it is a further relevant factor that war-time methods of construction, designed for speed and economy in the use of labour and of scarce materials, have called on the whole for much less skill than is needed for a normal building programme. In especial war work, with its hastiness, its resort to piece-work inducements, and its high degree of standardization, has offered hardly any opportunity for the training of skilled craftsmen; and from employers and operatives alike there has gone up the cry that the proper training of apprentices, even where there are any, is utterly out of the question on the predominant types of war-time work.

The situation is further aggravated by the uncertainties of the border-line between building proper and civil engineering, in face of rapidly changing constructional techniques. As we have seen, the building industry proper has in the past required a labour force consisting as to at least half its number of skilled craftsmen and apprentices or learners belonging to the recog-

nized skilled crafts, whereas civil engineering has not employed, at a generous estimate, more than 10 per cent. of skilled craftsmen and has played almost no part in training craftsmen except for a few highly-specialized small trades, such as steel-bending—and even then not under any regular form of apprenticeship. The growth of civil engineering at the expense of building proper has therefore been an additional factor making for the decline of craft apprenticeship.

Nor is this all. Even in the building industry itself the work of training apprentices has been for a long time past very unevenly spread. The employers who have done most in the way of training skilled craftsmen have been in the main the smallish and middle-sized employers in the provincial towns and country districts. London has notoriously drawn a high proportion of its skilled craftsmen from the provinces; and many of the big firms which were engaged before 1939 on large housing contracts employed hardly any apprentices, or perhaps none at all, preferring to use unapprenticed boys who were left to pick up what they could of the various trades without any actual apprenticeship either under indentures or under a verbal agreement. At the other end of the scale, the very small jobbing builders, employed mainly on repair work, have been in the habit of training 'handymen' rather than craftsmen equipped with thorough knowledge of a single trade: so that the vitality of the more regular forms of craft apprenticeship has depended unduly on the maintenance of the traditional methods by the better class of provincial builders.

Naturally under these circumstances, the building boom of the nineteen-thirties led to the entry into the building crafts of large numbers of men who were employed as craftsmen without having ever served anything that could be called an apprenticeship. These men had picked up their trades as learners, as best they could; and the absence of any clear line—such as could be drawn only if there were a regular and general system of apprenticeship under written indentures, which there was not—between apprentices and learners meant that these men, when they had once been employed as craftsmen, became indistinguishable from others who had learnt their crafts in a more regular way.

There were indeed, side by side with the firms which provided a regular craft training for their apprentices, trade schools and technical classes in the building crafts provided by the local authorities and by Technical Colleges not under local authority control. But this provision for technical education in building has been hitherto both quite inadequate in quantity and very unevenly spread over the country in relation to the dispersal of the industry. The inadequacy of the total provision has meant that the majority of those who have been through technical courses in building—except for part-time attendance at the more elementary evening courses—have tended to gravitate towards superior positions of supervision or office work rather than towards the ordinary manual crafts. This is not wholly true in all areas: in London, for example, building schools and technical courses have made some contribution towards recruiting the supply of ordinary craftsmen. But over the country as a whole this contribution has been small, though it was growing in the 'thirties, and plans for a considerable extension of facilities for technical training under the auspices of the local authorities were on the way when they were interrupted by the outbreak of war.

It has been implied in what has been said already that the building industry's arrangements for training craftsmen, either by apprenticeship or by any other method, were in a chaotic condition at the outbreak of war. A survey of the existing conditions, made shortly before the war by the National Federation of Building Trades Operatives, revealed a most unsatisfactory state of affairs.¹ To begin with, there was no national agreement of any sort regulating the conditions of apprentice training in the industry as a whole, as distinct from the wages to be paid to apprentices during their period of service. Such agreements as existed were either sectional or regional or local; and in many parts of the country there were no agreements in force. Moreover, even where agreements existed on paper, they were often observed by no more than a minority of the employers, and in some cases they were virtually a dead-letter. True, in one or two crafts, plumbing in particular, there existed

¹ See also, for a summary of the present position, the Appendix to the *First Report of the Building Apprenticeship and Training Council*.

on paper most excellent national agreements embodying model forms of apprenticeship. But when the facts were looked at, it appeared that the numbers of boys actually apprenticed under these model schemes were but a tiny fraction of the total numbers entering the crafts concerned. It seemed as if the making of a really good agreement would only mean that boys, instead of being loosely apprenticed, would run an increased risk of not being apprenticed at all. This is said, not in order to throw stones at the efforts made by those responsible for the better schemes to introduce an improved standard of apprenticeship arrangements, but in order to point out the very narrow range of their success. They have secured excellent conditions of training for a very few, but have been able to make practically no impression on the standards current in the industry as a whole.

It should be observed at this point that, in general, building apprenticeship was in a much healthier condition before the war in Scotland than in England and Wales, as far as the proportion of boys entering the building industry by way of apprenticeship can be regarded as a test. There are no complete figures subsequent to the Census of 1931; but at that date Scotland had both a far higher ratio of apprentices to craftsmen than England and Wales and a uniform system of apprenticeship extending over the greater part of the country, though it did not cover Aberdeen or the extreme north. This more favourable ratio must, however, be considered in connection with the fact that the building industry was altogether on a smaller scale in Scotland, and that Scotland had lagged a long way behind England in total building activity in recent times—especially in respect of housing, which was very backward. The comparatively satisfactory position of Scottish apprenticeship did not therefore mean in practice as much as it appeared to mean, though there did exist in Scotland a sound foundation for the development of the skilled labour force.

The position in both parts of Great Britain, as it was in 1931, in respect of the ratio of workers in training to adult skilled operatives is set out in the following Table, which includes with apprentices other learners who were in fact getting trained for a skilled craft.

TABLE XIV

NUMBER OF SKILLED BUILDING OPERATIVES OVER 21 FOR EVERY
APPRENTICE, LEARNER, OR IMPROVER UNDER 21

(Census of 1931)

	<i>England and Wales</i>	<i>Scotland</i>
Bricklayers	6·8	3·5
Carpenters	4·3	3·3
Masons	7·4	7·4
Slaters and Tilers	5·6	2·9
Plasterers	4·9	2·8
Painters	7·0	3·1
Plumbers and Heating Engineers	3·4	2·7
All Skilled Trades	5·2	3·3

It will be seen that there were considerable variations in the proportions in training for the various crafts, and that in all trades, except plumbing and masonry, Scotland made a markedly better showing. The reason for the smaller difference in plumbing was that in this trade, which is highly skilled and cannot be easily picked up by the casual learner, the position of apprenticeship in England and Wales was much less unsatisfactory than in the other main crafts. Carpentering stood next to plumbing in this respect; for the carpenter's job is one which involves the ability to work from drawings and is of a type that requires a more or less regular training. In the outdoor crafts especially it is plain that a high proportion of the new recruits during the boom of the 'thirties must have picked up their skill without any regular apprenticeship, or even learnership in any formal sense. Doubtless such newcomers found their way into the skilled crafts largely through the big firms and speculative builders who erected large housing estates, or through firms on the border-line between building proper and civil engineering.

In the absence of an inclusive national agreement, apprenticeship in the building industry was left to local, or at most, regional

regulation, or even to the unwritten traditions of the industry in the various areas. In practice, conditions differed widely. On the eve of the war there were formal regional schemes of apprenticeship in the Yorkshire, Northern, London, Eastern and Southern regions as defined for purposes of collective bargaining in the industry itself. In Lancashire and in the Midlands there were fairly numerous local schemes; and scattered local agreements were to be found elsewhere. But a good many places had only an unwritten practice: nor did it follow that, even when there was a paper scheme, its terms were generally observed.

The schemes varied greatly in content. In London, Yorkshire, the North, the South, and the East, as well as in most of the local schemes in the Midlands and in some elsewhere, provision was made for written indentures; but this provision was by no means generally applied. In Yorkshire, for example, it was stated that written indentures were drawn up only in 7 per cent. of the cases; and in the North the percentage was only about 15. The Midland Counties had formerly a regional scheme, drawn up after the last war; but this was terminated by the employers in 1926. There had been in most areas a good deal of friction. After 1918 an attempt was made to secure a general adoption of approved forms of apprenticeship throughout the industry; but this attempt largely broke down, partly because of quarrels over wages and conditions, but also partly because many employers objected to the Trade Unions exercising any influence over the conditions of apprenticeship, which they regarded as entirely their own concern. In particular, very large numbers of employers stood out against written indentures, because they did not wish to commit themselves to the full responsibility which such instruments involve. The indentured apprentice must by law be kept on and paid even when there is no work for him; and the master is under a legal obligation both to teach him his trade and to carry through with him to the end of his time except in cases of gross misconduct or incapacity. Many employers no doubt treated their unindentured apprentices precisely as they would have done if they had been working under written indentures. But others did not; and it was not uncommon to find unindentured apprentices stood off without

wages when times were slack, or even in effect discharged and told to try their luck elsewhere. Such practices were reprobated by the better employers; but there was no effective way of stamping them out.

Of course, this unsatisfactory state of affairs arose largely out of the extreme instability both of the building industry as a whole and of many of the firms engaged in it. The industry suffered too many fluctuations between the wars, depending both on the general state of trade and the movement of interest rates and on changes in Government house-building policy, not to drift into a state of chaos. Moreover, even a steady level of general activity would not have prevented wide fluctuations in the activity of particular firms and localities, according to the amount of building being done from time to time in particular places and to the success or failure of particular firms in getting contracts. This instability was increased during the 'thirties by the growing practice of certain big firms in taking on big contracts far from their home areas. In such cases, the firm commonly moved into the area where it had secured a contract only a nucleus of skilled workers, picking up the rest of its labour on the spot, including such juvenile labour as it needed. This was in certain areas an added force making for the casualization of juvenile labour and against the conclusion or satisfactory carrying through of apprenticeship agreements. Nor can it be left out of account that there were many firms in whose service it was in practice almost impossible for the apprentice to get a satisfactory all-round training because of the highly specialized character of their work, or because of the standardized 'rush' methods used in executing big contracts for cheap housing. This meant that it was sometimes of advantage to the learner to pick up his craft under more than one employer; but, in the absence of organized arrangements for transfer, such shifting made hay of the apprenticeship system.

There are unfortunately no figures available to illustrate the strength of these tendencies, which became a good deal more powerful during the boom of the 'thirties. In 1926, when the Apprenticeship and Training Committee collected data from about 7,500 building firms, it found that only 3,000 of these had any apprentices or improvers at all, and that only 29 per cent.

of the apprentices recorded were working under written indentures. Fifty-three per cent. were under verbal agreements, and 18 per cent., mainly in London and the Midlands, had the status of improvers. These figures were probably unduly favourable; for the 7,500 firms covered by the return were probably not an average sample of the firms in the industry, numbering in all well over 100,000, mostly very small. This conclusion is borne out by the fact that in the 7,500 firms three-quarters of the workers under 21 were classified as apprentices or improvers, and only one-quarter as labourers—almost certainly a more unequal proportion than existed over the whole industry.

One notable difference between areas in apprenticeship practice is in respect of age of entry. In most areas the recognized duration of apprenticeship is five years, though cases are found of both longer and shorter periods, and in some areas there is a minimum finishing age of 20 or 21. The most frequent age of entry is 16; but apprenticeship in some areas begins as early as 14, and lasts for as much as seven years. In Scotland it is common to enter as late as 18, and of course where late entry applies boys often serve a period as labourers in the industry before entering on their apprenticeship. In most cases, entry is later and apprenticeship is often of shorter duration in bricklaying and masonry than in the wood- and metal-working crafts; but conditions differ so much from place to place that no really comprehensive generalization can be made. Wages also differ widely; and so do the rules, when there are any, laying down approved ratios of apprentices to adult craftsmen. Nor is there any uniformity in the treatment accorded to boys who have spent a period under full-time instruction in a trade or technical school. Some allowance off the period of apprenticeship is usually made for this, on production of a satisfactory record; but the extent of it varies, and in some areas the industry pays very little attention to any training acquired off the job. Most apprenticeship schemes make attendance at night school compulsory, and a minority of employers allow some time off for day attendance. But there are wide variations in the enforcement of the night school provisions; and in general the industry has hitherto been slack in its care for technical instruction, and in many cases sceptical of its value. It is still common to hear the asser-

tion that no training is really of value except what the juvenile worker picks up actually on the job.

This is a somewhat gloomy picture ; but I do not think it is overdrawn, although there are of course a considerable number of employers whose practice is a long way above the average performance of the industry. Since the outbreak of war, as we have seen, conditions have grown appreciably worse, not only because the industry as a whole has been scaled down, but also because of the character of war-time building and the conditions under which it has to be done. It is very nearly true that, in estimating the post-war capacity of the industry in terms of skilled craftsmen, the contribution of war-time activity to the training of new entrants can be ignored, and over and above this a substantial deduction must be made in assessing the contribution of those who had begun their period of apprenticeship before 1939. Of the latter, some have drifted away into other occupations with their training unfinished : others have been working, for higher money, on labouring jobs ; and yet others, while nominally continuing their courses, have failed to get the same sort of training as they would have received in normal times. Where everything is being sacrificed to speed, and the industry is working largely under output bonus systems designed to speed up production to the limit, the craftsmen cannot give the time and attention that are needed for the proper training of apprentices ; and standards inevitably deteriorate.

II

Apprenticeship

This is the background against which we have to consider the position of building trades apprenticeship after the war, and the plans which are now being made for dealing with the problem of bringing into the industry the very large number of additional skilled workers it will evidently require. It is impossible, as I have said, to predict confidently what the post-war demand for building labour will be until the Government has made some announcement of its prospective building policy. This is the case because, even if we were to accept the estimate that the building force will need to be raised to a total of a

million and a quarter during the post-war years, the proportions in which this labour force will need to be composed of different types of skilled and less skilled workers necessarily depends on the character of the work which it will be called upon to do. Different types of building require different kinds and proportions of skilled labour, and this difference applies not only as between houses and other types of building, but also as between different housing schemes according to the methods of construction which it is decided to adopt. In any event, however, the number of skilled workers needed is certain to be large enough to involve the adoption of emergency methods of training on the biggest practicable scale. The size of the total post-war programme of construction will therefore affect rather the period of time over which the building industry will have to remain extended to the limit than the size to which it will need to be expanded as speedily as possible after the war.

Even if we were to accept the Government's estimate of the size to which the building industry will have to be expanded, and combine it with the lowest possible estimate of the proportion of skilled workers who will be required, the numbers called for would be obviously far beyond the possibilities of any training scheme based exclusively on the recruitment of boy-apprentices. There will not be nearly enough boys available in the labour market, in face of the demands of other industries, to supply the building trades with more than a fraction of the numbers they will need. Accordingly, a large part of the requirements will have to be met from other sources—above all, by means of special training schemes for men demobilized from the armed forces. This is not a matter open to argument: it is a sheerly inescapable fact, and is, I think, recognized as a fact by employers and workers alike.

It will, of course, be desirable to increase the resources of the building industry by training as craftsmen by way of apprenticeship as many boys as can be spared in face of other claims; and it will be desirable, if it is practicable, to raise the normal recruitment of boys into the industry under apprenticeship to a level adequate to meet the continuing need of the building crafts after the initial expansion has occurred. Plans for special forms of shortened and adult apprenticeship to be brought into force

as soon as the war ends are put forward not as substitutes for the apprenticeship of juveniles, but as indispensable additions in view of the depletion of the industry's resources and of the scale on which it will be necessary for it to expand.

With these considerations in mind, it will be most convenient to begin with the question of apprenticeship in its normal form—that is, of boys entering the industry for training either directly from the ordinary schools or after a period of preliminary education and training in a technical or building trade school. After many years of abortive negotiation, the two principal federations in the industry—the National Federation of Building Trades Employers and the National Federation of Building Trades Operatives—have at last put their signatures to a general Scheme of Apprenticeship which is meant to cover the industry as a whole. This scheme will presumably govern the greater part of the industry in future, though it will not necessarily supersede the specialized trade schemes which already exist for certain crafts—notably plumbing—nor will it automatically extend to non-federated firms, which are very numerous, or to building workers employed by firms belonging mainly to the civil engineering industry. The question of the non-federated firms is important; for they include a high proportion of the small, jobbing builders, whose quite informal methods of 'handyman' training do not fit in with the craft classifications accepted by the two federations, and are entirely unrecognized and unregulated. Similarly, the exclusion of civil engineering is important; for this is likely to be the field in which there will most rapidly develop new forms of skill, associated with new methods of construction, and falling outside the traditional fields of craft apprenticeship. Finally, the agreement will not extend in practice to such crafts as that of the electrician, which overlap between building and other industries. The fortunes of apprenticeship in this field are bound up more closely with the engineering than with the building industry.

In effect, the new apprenticeship scheme seems likely to apply primarily to bricklayers and carpenters, and to such smaller trades as stonemasons, plasterers, and slaters and tilers. How far it will apply to painters, who have a special scheme of their own not very widely enforced, remains still to be seen. Plumbers

will probably retain their own scheme in some areas and come under the general scheme in others, at all events until the new arrangements have had time to become fully established, and have been shown to work well.

The scheme accepted by the two federations provides for a minimum entering age of 15, but does not lay down any maximum age. It fixes the normal period of apprenticeship at five years, and the minimum at four years, with a provision that no indenture shall end before the apprentice is 20 years old, or continue after he is 21. This last proviso in effect fixes the maximum age of entry at 17 or, in normal cases, 16. These ages are, however, in practice modified by the clause which lays down that a period of at least two years at an approved Day Technical School may be counted as part of the apprenticeship, provided that the boy has obtained a satisfactory certificate of proficiency from the school. If he has attended for the two years, but has failed to obtain the certificate, the period of apprenticeship is to be reduced by one year. Thus, entrants from full-time technical courses will be able to enter the industry as apprentices as late as 18 or even 19. There is to be in all cases a period of six months' probation before the apprenticeship is formally confirmed.

The agreement goes on to make compulsory during the first two years, for all apprentices who have not already spent two years in a Day Technical School, attendance at such a school, in the employer's time, for a full day or for two half-days a week, in addition to attendance at evening school two nights a week. Day school, but not apparently evening school, fees are to be paid by the employer. In these clauses no account seems to have been taken of the probability that the new Education Act, which has since been debated in Parliament, would provide, as it in fact does, for compulsory attendance at a part-time Young People's College of a primarily non-vocational character. When this reform becomes operative, it will clearly have to be decided whether or not the requirements of the apprenticeship scheme for attendance at technical courses are to be additional to the State's requirements in the field of non-vocational education, or are to be modified so as to fit in with them. Undoubtedly, some building trades employers will press for recognition of attend-

ance at purely technical courses as a substitute for day continued education under the State scheme; but the more progressive employers fully recognize the need for continued non-vocational education beyond the school-leaving age, and obviously the building industry cannot expect in this matter to be treated differently from other industries. Indeed, the type of boy who enters the building industry needs continued general as well as vocational education very badly indeed.

There is in the new Apprenticeship Scheme of the industry one very curious provision. If an apprentice fails during his first term at the Day Technical School to reach a satisfactory standard of efficiency, the employer may refuse him leave to attend school during working hours. Unless this means that such boys are to be discharged from their apprenticeship at the end of their probation (and it does not say so) this refusal seems a strange way of setting about making them more efficient.

Attendance at day school in the employer's time is provided for, as we have seen, only during the first two years of apprenticeship, and only when the apprentice has not already spent two years in full-time attendance at a technical school. As against this, the obligation on the boy to attend evening school two nights a week continues throughout the apprenticeship. One would have supposed that it would have been desirable at the least to make provision for voluntary continuance of day-time attendance beyond the period of two years, with the object of helping the better boys to go on with their education and fit themselves for higher posts without having to put in all the necessary work after a full day on the job. But the building industry has always been backward in recognizing the need for higher education among its employees; and apparently it has not yet overcome this backwardness.

Most of the remaining provisions of the scheme relate to wages and conditions. The hours are to be the normal hours agreed upon between the employers and the trade unions in the industry. There is to be no overtime work for apprentices under any circumstances. Wages are to be, for the successive years of the apprenticeship, one-quarter, one-third, one-half, two-thirds, and three-quarters of the full craftsman's rate; and those who are credited with a part of their apprenticeship on

account of full-time technical education will start at the higher rates appropriate to the seniority accorded to them. Apprentices who are sick will be entitled to up to a month's full pay, less social insurance benefit, in any year. There is no provision for paid holidays beyond Bank Holidays.

Finally, the Apprenticeship Scheme provides for the establishment of national and local machinery to supervise its working. There is to be a National Joint Apprenticeship Board of 12 employers and 12 trade unionists 'to keep the scheme under review, and if necessary to suggest modifications thereto from time to time for the consideration and approval of the Executives of the Employer and Operative parties.' In other words, the Board is to have no power to modify the scheme, which will be alterable only by agreement between the two federations.

In addition to the National Joint Board there are to be Regional or Area Joint Apprenticeship Committees for the areas over which collective bargaining in the industry is normally conducted. These Committees, consisting of employers and operatives in equal numbers, are '(1) to keep under review the facilities provided by Local Education Authorities in their areas for technical and general education and to maintain a list of approved Technical Schools and Day Classes; and (2) to appoint Appeal Sub-Committees for dealing with disputes arising out of the operation of indentures under the scheme.'

Attached to the Apprenticeship Scheme are appendices giving model indentures and making provision for the setting up of a Trust Fund to deal with a particular problem which has given rise to many difficulties in the past. As we have said, the fluctuating character of the building industry and the instability of many of the businesses connected with it make many employers reluctant to bind themselves to carry out the terms of an apprenticeship deed over so long a period as five years; and this reluctance leads to many boys being accepted as trainees without any formal apprenticeship or any definite assurance that they will in fact be kept on continuously until they are out of their time. In order to meet this difficulty, it is proposed to establish a Trust Fund, to which the local Associations of Building Trades Employers will subscribe, for paying the cost of necessary arrangements for transferring apprentices from one employer

to another and for completing their training, where the arrangements made under the original indentures break down. This Trust Fund is also to be available for subsidizing schemes of building training and education over a wider field; but it is not made clear whether this is meant to be merely a residuary provision for using surplus funds or is to be operated on an extensive scale in order to improve the quantity and quality of technical education in the building crafts and professions.

This scheme has now been agreed to by both employers and operatives. The best feature of it is that the model indentures under it are not simply agreements between master, guardian, and apprentice, but definitely make the Trustees of the special Trust Fund parties to the indenture, and thus guarantee the completion of the apprenticeship even if the master goes out of business or otherwise defaults during its currency. This is a definite advance, which goes a little way towards the often recommended system under which boys entering the industry would be apprenticed not to a particular employer but to the industry or craft as a whole, under conditions which would make the representatives of the craft or industry guarantors of the provision of a satisfactory training. This would obviously be a better system; but the industry is not ready for it, and the small advance made by linking the industry as a whole to each indenture through the Trust Fund must be accepted as a step in the right direction.

III

Apprenticeship and Emergency Training

I come now to a curious feature of the negotiations which have been proceeding in the building industry during the past two years, while this apprenticeship scheme has been under discussion. Over the same period as the negotiations between the two federations have been going on, the Ministry of Works and Buildings has been engaged in dealing with precisely the same range of problems through the Central Council for Works and Buildings which is attached to the Ministry in an advisory capacity. This Council, presided over by the Director-General of the Ministry, has on it leading members both of the Em-

ployers' Federation and of the Trade Unions, together with other members. It has an Education Committee, on which sit, with employers and operatives, representatives of the various Government departments connected with building labour problems—the Ministry of Labour, the Board of Education, the Scottish Office, and the Ministry of Works and Buildings itself. This Committee was busy from 1941 to the end of 1942 preparing a scheme to deal with the entire problem of recruitment and training in relation to the industry's post-war needs, including both apprenticeship questions in the ordinary sense and the special problems of emergency training required for raising the numbers in the industry to a satisfactory level as speedily as possible after the war. Its report, issued in February 1943, covers the whole of this ground, and includes detailed estimates for training through various emergency schemes the number of additional workers who, in the Council's view, will be needed for the execution of the post-war programme. This total, it should be observed, is considerably larger than the total contemplated in the White Paper issued by the Government. The White Paper proposed to institute special training schemes for a maximum total of 200,000 men over a period of three or four years, whereas the Central Council proposed a scheme directed to train not less than 275,000 workers over a period of from $2\frac{1}{2}$ to 3 years. One particular difference between the two schemes appears to be that, whereas the Central Council's scheme allows for a considerable wastage among those who begin training but turn out to be unsuitable to graduate as skilled craftsmen and have therefore to be relegated to less skilled types of work, there is no similar allowance in the scheme set out in the White Paper. This discrepancy, however, has no direct bearing on the problem of post-war apprenticeship, as distinct from special training. In this connection what is obscure is how the plans drawn up by the Central Council of Works and Buildings, to which the employers and operatives on the Central Council are consenting parties, are related to the Apprenticeship Scheme drawn up by the two federations quite apart from the Ministry and without any reference to the problems of emergency recruitment after the war.

The plan worked out by the Central Council for Works and

Buildings included the establishment of a special Apprenticeship and Training Council, under official auspices; and, as we have seen, such a body was actually set up in 1943, and included representatives not only of employers and workers in the industry but also of the institutions supplying technical education, of the professional institutions connected with building, architecture, and civil engineering, and of the Government departments concerned with building problems. There is, however, a significant difference. The body proposed by the Central Council for Works and Buildings was designed to deal not only with normal forms of apprenticeship, but also with the emergency schemes of training to be used for augmenting the supply of craftsmen immediately after the war. The body actually set up, on the other hand, is to be concerned entirely with normal apprenticeship and kindred problems, and is precluded from dealing at all with questions of emergency training. Presumably the reason for this limitation is that the Ministry of Labour insists on keeping the emergency scheme entirely in its own hands, and is not prepared to hand over responsibility to a body predominantly representing the industry. This divorce between the control of apprenticeship and of emergency training was foreshadowed in the White Paper. How precisely the Government intends to organize the emergency side of the training programme is still unknown; but the divorce between the two parts of the scheme seems most unfortunate.

Apart from this difficulty, which, as we shall see, may well prove serious, there is another. For it is difficult to see how in practice in the field of apprenticeship, as distinct from special training, two bodies—one established by the industry itself without official representatives, and the other established by the Government with official representatives and also representatives from the various professional bodies connected with building—can exist side by side without friction or anomalous overlapping. Possibly the two ways of approach do not involve a direct conflict; for the new Apprenticeship and Training Council is not designed itself to operate schemes of apprenticeship, but is rather to lay down principles which should govern their working, and to endorse and approve actual schemes covering either particular localities or particular crafts. There is, however, at

least a suggestion of some conflict of views between those who hold that the industry should make its own arrangements without any element of Government control or intervention, and those who believe that the State should take a hand in organizing the industry in order to equip it to play its vital part in the work of physical reconstruction.

One point of obvious importance is that, if any question arises either of compelling firms to take a reasonable number of apprentices in the normal way or of introducing by compulsion some form of 'dilution' of labour whereby fully skilled craftsmen and emergency trainees will be employed together in proportions dictated by the condition of the labour supply, it is clear that only the State itself, or some body acting directly under the State's authority, can be entrusted with the requisite powers of enforcement. This points to the need for a body acting as the State's agent or adviser in drawing up and applying the necessary measures, and one would have supposed it to be manifestly desirable that this body should be in a position to deal both with entry to the building trades by way of ordinary apprenticeship and with special schemes of post-war training and recruitment. There ought surely to be a co-ordinated plan under which the number of emergency entrants can be tapered off as the supply of juvenile apprentices becomes sufficient to meet the needs of the industry; and in the working of such a scheme there ought to be close collaboration between the representatives of the industry and the agencies responsible for the various forms of technical education and emergency training. It is therefore to be hoped that, even if it is at present impossible to bring apprenticeship and emergency training under the auspices of a single fully representative body, some way will be found of linking these two activities together much more closely than appears to be contemplated. It is also to be hoped that the new Apprenticeship Agreement arrived at between the Federations of Employers and Operatives will not be allowed to come into conflict with the regulations laid down by the new Training and Apprenticeship Council, and that the relations between this body and the Federations of Employers and Operatives will be more clearly defined.

One source of confusion under the existing conditions is that

the responsibility for dealing with the problems of education and training in the building industry is at present divided between no less than four Government departments. The Ministry of Works has an evident concern with the problem, because it is mainly responsible for the Government's dealings with the building industry, including presumably any necessary reorganization designed to equip it for meeting post-war needs. The Board of Education, as the department responsible for technical education, is very directly concerned, because it will have to ensure that the Local Education Authorities make whatever arrangements may be needed for the expansion of building courses in Technical Colleges, Technical and Trade Schools, and special Technical Evening Classes. As the Board of Education covers only England and Wales, and there is a quite separate Scottish Education Department attached to the Scottish Office, the Secretary of State for Scotland is also involved in respect of Scottish technical education. Industrial training, however, as far as it can be divorced from formal education, falls within the province of the Ministry of Labour, which controls the Government Training Centres used before the war for the re-training of the unemployed, and since 1939 primarily for training of munition workers. Obviously, as after the last war, the Ministry of Labour's Training Centres will have to play an important part in schemes of emergency training of men released from the armed forces or from the munition factories; and their work in this field will need to be closely co-ordinated with that done in Technical Schools and Colleges under the aegis of the Board of Education and the Scottish Education Department. To add to the complexity of the situation, housing is not the affair of any of the Ministries so far mentioned, except the Scottish Office, which has a housing section of its own. In England and Wales housing is the responsibility of the Ministry of Health; and in Great Britain as a whole industrial building, as far as it falls within the scope of any Government department, is presumably within the orbit of the Board of Trade, as the body responsible for problems of industrial location and development.

This complexity of departmental responsibilities makes it very desirable that there should exist a central body on which

the various departments as well as the groups which make up the industry should be adequately represented. The Ministry of Works would seem to be the obvious body to act as the focussing point for such a co-ordination of all the groups concerned; and to achieve this was presumably the object of the plans put forward by the Central Council for Works and Buildings—plans which we have seen have been substantially modified by the Government in its White Paper.

These plans, we have seen, were meant to deal with emergency training as well as with ordinary apprenticeship. Emergency training has several different aspects. First, there is the problem of 'interrupted apprenticeships'—that is, of making special arrangements to ensure and to speed up the completion of apprenticeships broken off as a result of the war. In view of the prospective shortage of skilled workers and of the ages of the returning apprentices who have not served out their time, it will clearly be desirable to provide some form of intensive training under which the period remaining to be served can be substantially shortened. This can probably be done best by providing full-time courses, varying in duration with the stage reached by the apprentices before their training was interrupted; and these courses will presumably be held either in Technical Institutions or in Government Training Centres or in both, and at the end of them the apprentices will either seek employment as fully skilled men or go back for a final short period of training 'on the job', wherever possible in the service of the employers to whom they were previously attached. Where the apprentice was near the end of his time before the interruption occurred, it may be best in most cases to waive the unexpired period of training, and to grant the men immediately the status of full craftsmen. But probably a good many of them will need at least a short course in order to help them to pick up their skill again.

This is a comparatively simple matter. Secondly, there are the men who were serving in the industry as boys before the war, but were not under any recognizable form of apprenticeship or learnership. With this group may be considered some younger men who were working as labourers or handymen before the war, but are capable with reasonable help of being

upgraded to the status of skilled craftsmen. Both these groups will evidently need a period of intensive full-time training, probably in most instances of about six months, before they can be sent to work 'on the job' side by side with fully qualified craftsmen, even if thereafter arrangements are made for them to receive some teaching on the job from the skilled men with whom they will have to work. In these cases, the need is for the provision of intensive short courses in Technical Institutions or in Government Training Centres, as well as for the conclusion of agreements with the employers to receive them at the end of their courses and with the Trade Unions to help in training them on the job and not to bar their employment as craftsmen by enforcing pre-war rules about apprenticeship or about the proportion of fully skilled craftsmen to learners of every sort.

Thirdly, there is the special problem of the training and rehabilitation of partially disabled men, including both men who have previously worked as building craftsmen and others who are suitable for training in the technique of one or another of the building crafts. If the war involves heavy casualties, there will have to be arrangements for dealing with this problem on a considerable scale in all suitable industries; and the building trades, in common with others, will be called upon to absorb their quotas of partially disabled men. As much building work is heavy, there will not be any large scope for men whose disablement has seriously impaired their physique; but the lighter trades, such as painting, will clearly be suitable for some men whose disability is not too grave. This side of the problem falls within the general responsibility of the Ministry of Labour, which is entrusted with the task of dealing with the rehabilitation and training of disabled men over industry as a whole.

IV

Emergency Training

Finally, there is the wider problem of training for work in the building crafts men who have had no previous experience in the industry. The estimates of the total need for craftsmen after the war indicate plainly that there will have to be an

extensive recruitment of workers of this type, drawn partly from the armed forces on demobilization, and partly from the ranks of the munition workers and the services of civil defence. There are in the armed forces to-day, especially in the technical units of the Army and the Royal Air Force and in such corps as the Royal Engineers and the Royal Army Service Corps, large numbers of men who have been engaged while in these war services on types of work which will help them to adapt themselves to training in one or another of the building crafts; and the same condition applies to considerable numbers of men in the civil defence services. These men, like the groups referred to already, will need special intensive courses of varying duration to fit them for work as craftsmen in the building industry; and again these courses will probably need to be supplemented by a short final period of training actually 'on the job'. In all likelihood, the organization of courses for these men will be largely in the hands of the Ministry of Labour; but, if demobilization is carried out slowly, and there is an interval of uncertainty between the cessation of large-scale warfare and the definitive ending of the war, the question will arise whether a part of the required training can best be carried out, in order to speed matters up, before the men receive their discharge. A similar problem will arise where men are kept abroad for considerable periods awaiting repatriation and discharge, or where they are assigned to duty for a period in armies of occupation overseas.

The question that arises in these cases is whether training should be carried on under civilian or under military auspices. There is, in the industry, a strong feeling that the auspices should be civilian wherever possible, and that training under military auspices should be admitted only where the men have actually to be trained abroad. Where men do have to be kept abroad in the armed forces for substantial periods after the fighting is over, it is plainly desirable not to leave them kicking their heels, but to give them as soon as possible the opportunity of being trained for an occupation in which they will be likely to find a ready opening on their return to civil life. The building industry is pre-eminently a case in point, on account of its key position in the programme of reconstruction and of the labour shortage

which will inevitably exist in it for some years after the end of the war.

Naturally, it will be necessary to exercise considerable care in choosing the men who are to be given the opportunity to be trained as skilled building craftsmen. Only a minority of those who possess the required physical strength will be suitable on other grounds; and it is to be expected that, even if all practicable care is used, a substantial fraction of those who are accepted for training will fail to reach the necessary standards of skill. It is indeed often argued by those in the building industry that there are but few men who can be trained as efficient craftsmen unless they have begun to learn at an early age. The bricklayer's flick of the wrist is said to be very difficult to acquire after boyhood; and there are many men, otherwise suitable, who cannot get used to working outdoors at heights which are nothing to the accustomed craftsmen. I think, however, that these contentions are exaggerated. Admittedly, it would be preferable to replenish the ranks of the building crafts mainly or even exclusively by increasing the number of boys admitted as apprentices. But this course, as we have seen, will not in fact be open. There will be far too few boys to go round; and, besides this, the industry will not be able to wait four or five years while the next generation of craftsmen passes through the successive stages of normal apprenticeship.

The building industry will have to take into its ranks a considerable number of adult men, and to make the best job it can of training them to be craftsmen. As it will be of the greatest importance to achieve this without lowering standards of skill—which are none too high at present—it will be necessary to exercise particular care in choosing intelligent recruits, in devising suitable courses of instruction, and, last but not least, in providing a corps of thoroughly competent instructors. This last may, indeed, prove to be the most difficult problem of all; for, with the building industry crying out for more skilled workers, it will not be a simple matter to abstract from the urgent tasks of current production several thousands of the most highly skilled. Yet only the best are likely to prove competent as instructors; and in the interests of high production in the long run it will be necessary to take these men away temporarily

from the productive side of the industry. It will also be necessary, as a preliminary step before the main work of training begins, to provide in the Technical Colleges and possibly in the Training Centres of the Ministry of Labour intensive courses for the training of the instructors needed for the larger scheme ; and in devising these courses it will be possible to profit by the Ministry of Labour's experience in improvising similar courses for the training of instructors in various kinds of war work.

The longer the war continues the more urgent becomes the need to make a start with the measures that will be needed even before it ends. Arrears of building are piling up more and more : more of the older workers now in the industry will die or retire ; and there will be more casualties to deplete the ranks. It is therefore vital to do what can be done, without waiting for the end of the war, in order to lighten the task. Already the Board of Education and the Scottish Education Department have taken steps to expand considerably the accommodation for war-time courses in building subjects open to boys below calling-up age, or to men unfit for military service. Advantage is already being taken of these opportunities ; and the effect will be to compensate to some extent for the war-time decline in apprenticeship, and to provide at the end of the war a nucleus of boys or young men suitable for intensive courses or special shortened apprenticeships. A little has also been done to enable men in the civil defence services, during the period of relative freedom from air raids, to take courses in building subjects ; and this should provide a further small contribution to the ranks of potential craftsmen at the end of the war.

Beyond such measures, not much can be done till war ends in Europe, save by way of preparation. But preparation is of the first importance ; for it will be necessary to get the entire scheme of training into working order at the shortest possible notice when the time comes. One essential preliminary step is the compilation of a careful register of skilled building workers, including those now in the armed forces, or on civil defence, or in munition factories, as well as those who remain in the industry to-day. Such a register would furnish the means, not only of getting back as speedily as possible the key producers on whom the rapid recovery of the industry's efficiency must

depend, but also of 'spotting' men to act as instructors both after demobilization and, where necessary, also before demobilization in units stationed abroad. Another essential part of the preparatory work is to get the machinery for regulation both of ordinary apprenticeship and of special training schemes into existence as soon as may be, and to clear up the ambiguity about the respective spheres of action of the proposed official or semi-official body under consideration at the Ministry of Works and the purely industrial body at present in process of establishment by the two federations of employers and operatives.

It will be noticed that throughout this chapter I have been assuming that it is desirable to extend the provision for apprenticeship in the building crafts, and that for this purpose the traditional crafts can be accepted pretty much as they stand. This view is of course open to dispute. There are not a few who hold that the building industry is on the eve of a technical revolution which will speedily supersede the existing types of skilled labour, at any rate over a large part of the field, and that new materials, new processes, and standardized pre-fabrication which will transfer a large part of the work now done on the site to the factory, will render necessary quite new methods of training and perhaps do away, except for a few, with the need for prolonged training of any kind.

I do not dispute the existence of these tendencies, or their very great long-run importance. But I do not believe they are likely to affect very much the nature of the measures for the recruitment of the building industry's labour force that will be needed immediately after the war. I do not believe that cottage-building, which will constitute the biggest single item in the post-war programme, is likely to be so altered as to dispense with the traditional skill of bricklayers, painters, carpenters, plasterers, and plumbers to more than a limited extent. I do not believe that flats are going to replace houses save in exceptional cases, or that pre-fabrication is likely to affect greatly the building of the shell of the house, except for housing of a temporary kind. I believe that the changed methods, to the extent to which they do come in, will be largely taken over and used by the members of the existing crafts, as has been the case hitherto. Of course, I agree that in the construction of very large buildings and in

other kinds of public works there will be a growth of new types of skill of the constructional engineering order; and there is everything to be said for the recognition of new crafts as they emerge and for the provision of special training for them. In the Technical Institutions and Government Training Centres after the war there will have to be arrangements for training in these new kinds of skill or dexterity; and, as many of the new processes call for a lower or narrower range of dexterity than the older crafts, it may well be possible to train for them men who prove incapable of being made into fully-skilled craftsmen of the traditional kinds. It should be the aim of post-war training schemes as far as possible not to reject those who prove unable to develop a high degree of all-round skill in one of the traditional crafts, but to train them for less exacting jobs either in building or in some branch of civil engineering.

Of course, if I am wrong, and the cottage built on the site is largely replaced after the war either by the pre-fabricated dwelling or by huge blocks of flats built with quite different techniques, the forms of training will have to be greatly modified to fit in with the changed requirements. But the need for training will still exist. In that event, what will happen will be, for some time at any rate, that less training will be done on the job, and more in Technical Institutions and Government Training Centres, which will have to adapt their courses to the teaching of the new kinds of skill. My own view, however, is that, while there will be need for training in new skills and dexterities, the main need will be to replenish the ranks of the familiar crafts—with, of course, some modification of training courses where the nature of their work is being altered by changes in building technique. The conception of training in the familiar crafts need not, and must not, be static: the way of progress is to adapt these crafts to the new tasks, rather than to supersede them.

In one respect only is there a strong case for modification, based not on any new technique, but on a maladjustment of long standing. The 'handyman'—that is, the man who works for a jobbing builder almost exclusively on repair and maintenance work—ought to be recognized as a distinct kind of craftsman, requiring a special training, and deserving a status of his own in the building industry. This will be a matter of special

importance just after the war, when there will be very large arrears of repairs and maintenance needing to be speedily made good. Many men who have been working in the R.A.F. or in the Army or Navy on maintenance jobs will be admirably suited to become builders' 'handymen', not confining themselves to work within a single craft, but doing a little in many crafts. This will happen, whether it is planned for or not. It would surely be wise to plan for it, to supply the appropriate kinds of special training, and to secure recognition and standards of remuneration and service for this very important class of workers.

The suggestions here put forward deal both with the urgent problems of reconstruction and with longer-run problems. There is, of course, some danger of conflict between immediate and more distant objectives. The demand upon the building industry just after the war will be like the demand on the engineering industry now—a demand for immediate results on the largest possible scale. It will be important to meet this claim in such a way as to do as little harm as we can—and if possible none at all—to the long-run efficiency of the industry. This means that care must be used in selecting men for training as craftsmen, that everything possible must be done to keep the standard of the training courses high, and that every endeavour must be made to increase the numbers of boys entering the industry by way of regular apprenticeship, and to get a good quality of boy to enter. In the past, it must be admitted, the quality has not been good. But who can wonder? The instability of the industry itself and of many firms in it, the chaotic condition of the arrangements for apprenticeship and their quantitative inadequacy in many areas, were highly deterrent factors. They made prudent parents very shy of letting their boys enter the building crafts, and meant that there was hardly any entry from secondary schools, and that what there was from technical institutions consisted largely of boys who hoped to qualify for administrative or supervisory posts, rather than for ordinary craft work. If, as we may reasonably hope, the building industry after the war can offer prospects of steady employment for many years to come, there will be a great opportunity for reforming its organization, and for introducing

new and better methods of recruitment and training so as to attract a higher class of entrants. This opportunity needs seizing now, both by the industry and by the Government. The industry should set its house in order before the war ends; and the Government, by declaring plainly its intention to maintain a high level of building activity over a long period of years, should provide the assured foundation on which alone a reformed structure of the industry can be securely based.

CHAPTER X

THE FINANCE OF HOUSING

It would be a fruitless task to attempt at the present time to estimate the money cost of an adequate post-war housing policy—let alone of an adequate policy covering all types of buildings. There are far too many uncertain factors, including the level at which building costs will settle down after the war. Costs have risen sharply during the war; and recent experience of attempts to get built a few cottages for agricultural labourers are by no means encouraging. War-time costs cannot, however, be taken as any indication of costs after the war, as they are greatly affected both by abnormal shortages of materials and requisites and by the acute scarcity of labour. I am not saying that costs will be substantially lower than they are to-day, in terms of money; for that must depend on general monetary conditions which are still unknown. But real costs, in terms of man-hours of labour in the processes of building and of preparing materials and components off the site, ought to be a good deal lower if the task is approached in the right way, with the aid of mass-production methods both in the factory and in the actual building.

Estimates of man-power needed are a good deal more valuable than estimates of money-costs, under such conditions as now exist; and to that sort of estimating I have got as near as I can in previous chapters of this book. In the present chapter, I propose to discuss, not how much an adequate policy will cost in money, but how costs can be kept down in relation to any given programme based on an allocation of real resources to the building industry.

It is generally recognized that rates of interest, however little influence they may exert on many forms of investment, are of very great importance in connection with house-building. The house-building boom of the 'thirties followed upon, and was directly stimulated by, the sharp fall in interest-rates which followed the conversion of the Five per cent. War Loan left

over from the last war to a lower yield. Houses are, in comparison with most other forms of investment, very durable goods; which means that the capital locked up in them is locked up over a long period of years. The rate of depreciation or amortization which need be charged against it is low: housing loans are commonly repaid by local authorities over a period of sixty years. In order to make building remunerative to the owners of houses, it is necessary for them to see a return which will cover the rate of interest and the amortization. The cheaper the rate at which long-term capital can be borrowed, the lower the rents at which houses can be remuneratively let. If a house costs £500 and the rate of interest is 5 per cent., £25 must be recovered to meet the interest charge, apart from amortization and repair costs. If the rate of interest falls to 3 per cent., only £15 need be recovered. This means, in terms of the weekly rent, a difference of nearly 4/- a week in the economic rent.

Admittedly, the greatest difficulty in the way of raising housing standards to a satisfactory level, apart from the shortage of building labour, is the inability of the main body of the tenants who are now badly housed to pay rents adequate to cover costs. If housing is left to unaided private enterprise, this is in itself a sufficient deterrent: it means that houses to re-house the slum-dwellers, the overcrowded families, and the rest of the poorer wage-earners simply will not be built. If such tenants are to get decent homes, either the State must provide them, or aid local authorities to provide them, or there must be subsidies to private enterprise—subsidies which, incidentally, it will be impracticable to confine to cases in which they are really required. This was recognized between the wars; and the State, after trying the policy of subsidies to any one who would get a house built, returned to the policy of subsidizing directly only houses built under public ownership, though it also continued in effect to subsidize investors in Building Societies by tax remissions.

Even with gilt-edged rates of interest at or near 3 per cent., it was impracticable in the 'thirties to build houses without subsidy for letting at rents which the poorer families could afford to pay; and Building Societies, even with the generous treatment they received from the State, did not fill the gap, but financed

house-purchase at price-levels beyond the means of the majority of the people. With actual building costs probably higher (though one cannot say how much higher) after the war, there will be even less chance of getting working-class houses built without subsidy; and no one, I think, professes to believe that this can be done on anything approaching an adequate scale. It is, however, clearly important, if there are to be subsidies, that they shall be no bigger than they must be in order to enable decent houses to be let at payable rents. It is therefore of the first importance to ensure that the capital applied to house-building shall be made available at the lowest possible rate of interest; for, the lower the interest, the smaller will be the subsidy that will be required.

Suppose we set out to build non-parlour houses for letting at not more than 10/- a week, inclusive of rates, with proportionately higher rents for parlour houses and, probably, lower rents in agricultural areas; and suppose that the non-parlour houses have an all-in cost of £600. (The figure, it should be noted, is purely illustrative, and is not meant as a prophecy of what the cost will actually be.) £600, at 3 per cent., means £18 a year for interest only—or nearly 7/-, much too high a figure to allow the house to be let at an inclusive rent anywhere near 10/-; for, unless there is to be a radical reform of local government finance, so as to shift burdens from house-occupiers as such to other classes of taxpayers, we must allow about 4/- for rates, apart from all other charges. If this £600 had to be raised at 5 per cent., it would represent £30 a year; and the 10/- would be considerably exceeded without any allowance for rates or for any other element of cost.

Clearly, if we are to get houses built on an adequate scale and are to make them available to tenants at practicable rents, the finance of housing must be on a 3 per cent. basis at most, unless we are to spend colossal sums in subsidies. If the State tries to subsidize house-building on any conditions which involve finance at a rate in excess of the lowest gilt-edged rate, it will be either squandering the taxpayers' money, or failing to provide houses within the paying capacity of the classes that need them most.

The obvious moral is that the State, either directly or through

the local authorities, must make itself responsible for the house-building which is designed to meet the needs of the main body of the people. The State possesses the advantage of cheap credit, at a rate which it can itself determine, at least within limits, provided that it possesses an adequate control over the banking system. The larger local authorities can borrow at or very near the gilt-edged rate; and it is a simple matter for the State to place similar borrowing facilities at the disposal of those local authorities whose standing in the capital market is less good. Smaller local authorities have in the past borrowed largely through the Local Loans Fund, at a cost which has been somewhat above the rate at which the State itself could borrow at long term. There is, however, no reason why the State should not forgo any charge for management, and lend to local authorities for housing purposes at the rate which it can itself command—or indeed at a lower rate, if that seems the best form of subsidy. What the State must not do, and cannot do without gross waste of public money, is to subsidize the building of houses at costs driven up by interest charges higher than the lowest gilt-edged long-term rates. Yet this is what will inevitably happen if any attempt is made to stimulate housing by subsidies to private enterprise, or by special facilities to the Building Societies in financing house-purchase.

The great bulk of post-war house-building ought to be public building, undertaken either by the State or by local authorities acting with its help or by special public bodies established for the purpose; and there ought to be no subsidized building of any other sort. Only so can subsidies be kept down to a reasonable figure, and decent houses be provided at rents which ordinary working-class householders can afford to pay.

At this point there arises an issue which sharply divides most (or at least very many) Tories from progressives. Many Tories believe quite passionately that it is a good thing for people to own their houses, because such ownership gives them 'a stake in the country', and tends to infect them with the mentality of the owner of property. I do not dispute that house-ownership quite often has this effect, even where the terms on which the ownership is acquired are manifestly disadvantageous to the owner. I do, however, strongly dispute the justice or the

expediency of encouraging house-ownership among the main body of the people.

The first part of the case against house-ownership is this. When a man buys a new house which he has not the capital to pay for, he usually borrows most of the money from a Building Society or from an Insurance Company, but is compelled to put down a part of the purchase price himself. He then pays to the lenders of the money an annual sum which meets the interest and provides for gradual repayment of the principal over a period of years, at the end of which the house becomes his property. Even if the house which he acquires by this method is structurally sound and reasonably well designed—and there have been very many cases in which this condition has not been satisfied—the purchaser is placed at a heavy disadvantage should a change in his employment compel him to move to another district, or should he die or be compelled to dispose of the house before the instalments have been paid off. The house, as soon as he moves into it, becomes a second-hand house; and houses are subject to much the same conditions as motor-cars in that they tend to lose an appreciable fraction of their capital value the very moment they cease to be brand-new. Wherever houses are being built in large numbers, and are being improved from the standpoint of gadgets, even if not of real amenities, there is a premium on the newest houses, which tends to lower the value of those built even a little while before. This does not matter to the Building Society or Insurance Company which has advanced the money; for it has advanced less than the total price, and will at any time be fully covered, first, by the margin advanced by the purchaser at the start, and later by his annual payments towards clearing off the loan. The purchaser, however, if he has to move, runs a very great risk of losing the savings which he has put down in order to cover the balance of the purchase money, and may even lose a part of the instalments which he has paid in liquidation of the loan.

This, it may be said, does not hold good unless the buyer has actually to sell the house, and may not hold good even then—for some houses keep their value, and some even appreciate under exceptionally favourable conditions. Unless, however, interest rates are allowed to rise, houses in general will tend to

fall in value early in their lives, whenever an active house-building policy is being pursued. We may neglect the exceptional case where a man is lucky enough to sell his house to advantage; and I hope we may also dismiss the notion of interest rates being allowed to rise, for the keeping of them low is an essential part of any policy aiming at the maintenance of full employment. I agree that the actual money loss is directly felt only by the house-purchaser who is forced to sell his house; and it is far from my design to discourage from house-purchase anyone who prefers to live in a house of his own and either can afford to lose by it or can feel a reasonable assurance of wishing to remain in it for the rest of his life. The people I am thinking of are not those who buy houses because they want to buy them, but those who are forced to buy them because there is no other way of getting a tolerable roof over their heads. I say nothing against house-ownership, where it is really a matter of voluntary choice. I have a great deal to say against it, where it is forced on reluctant buyers either by Building Societies or other financial agencies, or by Tories in pursuance of a social philosophy which I detest.

Apart from the adverse financial conditions upon which many people have become house-owners in recent years, there is the strong objection from the social standpoint that house-ownership conduces to the immobility of labour, whereas it is clearly undesirable to add yet another to the many forces which already tend to anchor the worker to a single place. This is a question not only of migration from one town or district to another, but also of migration within a district. A worker may get a job at the very other end of a great urban area to that in which he is buying a house on the instalment plan, and may be practically forced to make long daily journeys to and from work because of the financial loss which he would have to incur if he sold his house and had to buy another. Nor is the point about migration from one district to another unimportant. It may be desirable on economic and social grounds to aim at a large re-distribution of population in Great Britain; but the more house-ownership by the workers is extended, the greater the obstacles in the way of such migration are bound to grow.

There is yet another reason. For those who have means enough to be able to afford empty rooms, it may be desirable, where the conditions of work permit, to make a home and settle down in it for life. But for those whose means are narrow, it is important to adjust spending on house-room to changing family needs. A young couple, on first setting up a home, does not need so much house-room as will be needed when there are several children at home; and as the children grow up and marry, or move away to jobs at a distance, the need for house-room again grows less. It is often urged that house-building policy ought to pay more attention to the sizes of the families for which houses are being built; but such an adjustment is inconsistent with the notion that most families should go on occupying the same house throughout the parents' lives. It may be urged that families which have rooms to spare can always take in lodgers; but even apart from the fact that the necessity of taking in lodgers in order to make both ends meet is often exceedingly irksome, what is likely to happen much more often is that there will be serious overcrowding at the stage when the household is at its maximum size. We ought to make it as easy as we can for couples to begin in small houses or flats, move into larger houses when the children need more space, and move again to smaller houses or flats when the family grows up and moves away from the parental home. To make such shifts easy would be economical both from the standpoint of the State—for it would render it possible to build more small houses without giving rise to overcrowding—and from that of the householders—for it would enable them to distribute their incomes better in relation to their changing needs.

Against all these obvious disadvantages of forcing ownership on people who do not desire it or cannot afford it without deprivation of other needed things there is no corresponding advantage, except the supposed advantage of giving more people a 'stake in the country'. Surely, if the poor are to be encouraged to become men of property on a small scale, they ought to be given the best possible return on the investment of their savings, and not to be compelled to sink them in an exceedingly risky form of property.

These things are all too seldom said, though they need saying,

because the Building Societies and the Insurance Companies, which have become the depositories of vast funds invested in mortgages on house-property, are exceedingly powerful vested interests. Building Societies have been in recent years an extraordinarily profitable outlet for the savings of the small and middle-sized investors; and a vast number of people have money in them. Anything that threatens to narrow the openings for placing new mortgages is therefore hotly opposed by a considerable body of investors, as well as by a large army of officials connected with the Societies. Yet the test of the merits of the Building Societies should be, not whether they are good to invest in, but whether they benefit those who borrow from them. Judged by this criticism, they are expensive sources of housing finance.

Why, then, it may be asked, do so many people make use of their services? Between 1924 and 1939 the number of share investors in Building Societies increased from one million to well over two millions, and the share and loan capital rose from £137 millions to £711 millions; while the amount of new advances on mortgage, which was £41 millions in 1924, mounted to £137 millions in 1938. The reason for so much money being invested in the Building Societies is clear enough: they offered, thanks to exemption from income-tax payments, a very good return to the investors. The reason for so much being borrowed from them is no less plain. People had to have houses; and so few houses were available for letting, especially in the rapidly growing areas, that a great many people had to buy whether they wished to or not; and there was in most cases no alternative to buying through either a Building Society or an Insurance Company, though in some areas better facilities were available for the purchases of the cheaper houses under the Small Dwellings Acquisition Acts. The speculative estate developers were acting in close league with the Building Societies, which largely financed their operations. On many estates it was a matter of course that whoever wanted a house should borrow the money through the Building Society with which the estate development company was connected.

This type of financing, even if something is done to make it cheaper than it was before the war, is bound to be dearer than

financing by public bodies at gilt-edged interest rates.¹ It is, moreover, much easier for municipalities, or other public bodies, to supply not merely houses, but communal services as well. We have seen earlier in this book how private enterprise development between the wars led to the creation of urban and suburban settlements totally devoid of collective amenities and of the means of bringing into being a spirit of local community—except indeed where such a spirit was engendered by hostility to the development agencies, and took shape in a Tenants' League or some similar organization of collective protest.

The most frequent proposal of the opponents of extensive public provision of houses is that the State and the local authorities should limit themselves to the erection of dwellings to be rented at less than a certain amount per week, and should leave the provision of all other houses to the speculative builders and the private financial agencies. It is usually proposed to put the rental limit for public enterprise very low, in order to leave private enterprise the largest possible scope. The private agencies are usually quite willing to let the State take charge of the building of the smallest houses, because there seems to be little or no profit in them, but are strongly hostile to State action wherever they think they can see their way to arrange for building on profitable terms. Such a division, apart from the fact that it would exact unduly high rents from those needing larger houses—for example, from big families—would be socially most unfortunate, because it would aggravate the tendency towards one-class settlements instead of mixing people belonging to different social and economic groups. There are countless examples of this evil tendency in the estates developed by private enterprise between the wars; and a corresponding tendency existed for municipal housing estates also to become one-class settlements, designed for those for whom private enterprise was unable to provide. Systems of differential rents, according to means and family responsibilities, such as were attempted by many municipalities in the 'thirties, were largely thwarted because the municipality could pool rents only among its own tenants, and was thus to a considerable extent taxing the slightly

¹ For a fuller discussion of this problem see my booklet, *Building Societies and the Housing Problem* (Dent, 1943).

less poor in order to subsidize the slightly poorer. Family allowances will, of course, do something to lessen the need for rent rebates in the interests of the bigger families. But it remains of the greatest importance that housing should not segregate the population by income classes, more than it is bound to be segregated as long as the present class system continues to exist.

It must not be overlooked that there is a very large class of property-owners—the owners of old houses—who have a strong interest in preventing new houses from being cheap. The more new houses cost, the higher will the value of old houses tend to be, wherever rents can be adjusted freely to market conditions. If interest rates on the capital used in house-building are high, so as to raise the rents of new houses, the older houses will experience less competition from them, and will tend to have a longer life and to remain in occupation long after they ought to be scrapped. Of course, where the rents of the older houses are strictly controlled, the owners are prevented from exploiting their position. But many property-owners live in hopes of seeing rent restriction again relaxed, or even given up, and look forward to a time when the rents chargeable will again be governed solely by the forces of supply and demand. It is to the interest of such owners that new houses should be expensive to build; and they are likely to ally themselves with the upholders of 'private enterprise' in new housing against projects for large-scale erection of houses by public bodies with cheap capital at their command.

The upshot of this chapter is that, if the housing shortage is to be overcome, so as to make houses available in adequate numbers at rents which ordinary people can afford to pay; if it is to be made easy to shift house in response to changes in the size of the family or to a call to take up a new job; and if housing estates are to be developed into real communities instead of mere aggregations of brick-boxes, miscalled homes—if these things are to happen, the great bulk of post-war housing must be provided by public bodies. This conclusion, however, leaves open the question whether the work ought to be undertaken, as in the past, exclusively by the local authorities acting as agents of the State, or whether there is need in addition for new agencies

to supplement the existing local authorities, especially in the building of new towns, or in areas where urban development needs to be planned on a larger scale than is practicable for any single local authority of an existing type. To this side of the problem we must now turn our attention.

CHAPTER XI

PROBLEMS OF ORGANIZATION

UNDER the existing statutory conditions, as we have seen, the direct responsibility for housing policy rests with the Ministry of Health for England and Wales, and with the Secretary of State for Scotland. Under these departments are the local authorities of all sorts and sizes—in England and Wales County Borough Councils in the cities, County Councils, Borough Councils, and District Councils in the rest of the country. For planning purposes, there is the shadow of a co-ordinating organization in the joint bodies, executive or advisory, which have been constituted by neighbouring local authorities; but in housing matters each local authority is entirely independent, even where County Councils and Borough or District Councils exercise concurrent powers over the same areas. Of course, there is in practice some consultation and some measure of neighbourly collaboration; but this is as it happens, and has no formal or statutory basis.

A quite different department, the Ministry of Works and Buildings, created out of the pre-war Office of Works, is mainly responsible for the war-time organization of building as a national service under government control. At one time it seemed likely that this department would develop into a Ministry of Works and Planning with wide responsibilities in the field of reconstruction. But in this respect policy was reversed. The planning functions transferred to the Ministry of Works from the Ministry of Health were taken away again, and were handed over to the new Ministry of Town and Country Planning, with the effect of leaving the future of the Ministry of Works and Buildings entirely uncertain. Since then, the Ministry of Works has been given the responsibility for the planning and control of temporary housing; but in the main part of the field the responsibility of the Ministry of Health (and therefore also of the Scottish Office) has been reaffirmed.

The Ministry of Health and the Scottish Office are, of course,

the departments which have charge of the general dealings of the State with the affairs of local government and especially with the financial relations between the two. This financial aspect of the matter is important, because even before the war the finance of local government was in a state of considerable confusion, which war conditions have made very much worse. The pre-war problem was primarily that of the depressed areas, in which the burden of mass unemployment, prolonged over many years, had made exceptionally heavy calls on reduced local resources, so that rates had become almost unbearably severe, despite the operation of the 1929 'formula', under which State aid was weighted to some extent in their favour. To these pre-war victims of unemployment have now been added not only the places which have suffered badly from bomb-damage, but also a large number of others in defence areas, whence populations have been evacuated or where normal tourist trade has been suspended.

The structure of local finance, rickety enough before 1939, has become by this time entirely incapable, over a considerable part of the country, of sustaining the responsibilities which will have to be borne somewhere when reconstruction comes to be taken in hand. Whether the structure of local government is left as it is or undergoes substantial modifications, there will have to be a large amount of central assistance to areas which are too impoverished to meet the needs of reconstruction, over and above the assistance which is given to all local areas out of central funds. Presumably the administration of this assistance, where it is not automatically determined by formula, will be in the hands of the Ministry of Health and the Scottish Office; and presumably it will include appropriations in aid of rebuilding necessitated either by war damage or by the requirements of local schemes of planning and development.

Where exactly the lines of demarcation will be drawn, in England and Wales, between the functions of the Ministry of Health and those of the Ministry of Town and Country Planning, when the time comes for approving local planning schemes and for authorizing the expenditure to be incurred in carrying them out, nobody seems to know. It looks very much as if the Ministry of Town and Country Planning will have merely

the power of endorsing paper schemes, which the Ministry of Health will be able to veto, if it wishes, by the refusal of the requisite financial help. Perhaps the two departments are intended to work in so closely together that no question of this sort can arise; but it is also quite on the cards that the problem has not in fact yet been faced, and that no Government decisions have yet been reached either about the amounts of financial help which local authorities are to receive from the State in connection with planning and building, or about the machinery by means of which the controls accompanying national aid are to be administered. Yet this question must be faced and settled before physical reconstruction, as distinct from the making of paper plans, can really begin.¹

It has been stressed in previous chapters that, in order that planning and building may proceed on sound lines, it is indispensable to have the former done over areas considerably larger than those of most of the local authorities. The physical re-planning of the country, as distinct from the detailed execution of the plans, is a matter that needs regional handling, subject to a good deal of national co-ordination of the various regional plans. Even if the actual execution of plans so made can be left largely in the hands of the separate local authorities, so that most of the spending has to be done by them, there will arise at all points large questions about the effects which regional plans of development will have on the one hand on the financial burdens which the separate local authorities will be called on to assume, or to share with the State, and on the other upon the future rateable values of the various areas, according to the amount and character of the development which takes place within their respective frontiers. If, for example, it is proposed to build a satellite town a few miles away from an existing town

¹ This book was written before the production of the Town and Country Planning Bill of 1944. The financial provisions of this Bill are, as I write these words, under active discussion between the Government and the representative associations of local authorities, which have taken strong exception to them on the score of their inadequacy. The Government's financial proposals are, indeed, manifestly a long way short of what is needed if local authorities are to be enabled to embark on large projects of urban re-planning. I leave the paragraph to stand as I originally wrote it because I do not know what changes will be introduced into the Bill before it becomes law.

or city, and well outside its municipal boundaries, it will have to be settled whether the financial responsibility is to rest with the city to which the new town is designed as a satellite, or with the County Council or the District Council in whose area the new town lies, or with them all, acting through some joint body. The scheme-making involved in post-war town and country planning in areas where any considerable re-building or development is in contemplation will not be simply a matter of drawing maps. It will be also a matter of drawing cheques and of allocating carefully the respective financial responsibilities of the various local bodies concerned and of their rate-payers.

Is the Ministry of Health well equipped, or can it be made the right body, for supervising this co-ordination of local financial contributions to planning and building, and for deciding what in each case the financial aid to be given by the State is to be, and how it is to be apportioned? The functions of the Ministry of Health in relation to the local authorities are not, of course, confined to building: they range over most of the field of local government, including public health and such social security services as are administered through the local government machine. It is still unknown whether this multiplicity of functions is to remain in the hands of the Ministry of Health. If a real Ministry of Social Security were set up¹, some of them would presumably pass into its hands; and there have also been proposals to remove the projected new national medical service and place it either under a Ministry of its own or under an independent Commission. If it is proposed to treat medical and some part of the social security services in this way, by setting up independent or semi-independent Boards or Commissions for their administration, what about housing? Is not housing also more suitable to be put in charge of some sort of National Housing Board or Commission than to be left in the hands of a sub-department of the Ministry of Health?

The notion of a National Housing Commission or Corporation has already been adumbrated in several quarters; but usually it has not been made at all clear what the proponents of the

¹ The Ministry of National Insurance, set up since this was written, is not such a Ministry, though it may be its forerunner.

notion want such a body to be or to do, or how those who advocate it intend it to be composed, or with what powers they wish it to be endowed. At one extreme, it seems to be contemplated that housing duties should be taken away entirely from the local authorities and transferred to a Corporation, which would then become responsible for getting houses built wherever they were needed, and presumably also for slum-clearance and for the demolition of obsolete dwellings. It can be said at once that a Corporation of this type would be entirely out of harmony with the preservation of independent local government or with the maintenance of local or regional responsibility for town and country planning. Any proposal to set it up would be resisted fiercely by practically every local authority in the country, and would arouse so much controversy that there would be no chance of getting it accepted by Parliament, or indeed sponsored by a Government of any party complexion. Such a project, therefore, can safely be dismissed as inapposite and unworkable. The local authorities, either acting separately or grouped for certain purposes, will insist on keeping control over publicly provided housing in their areas, at any rate where it is provided either for slum-clearance or the relief of overcrowding, or for meeting the normal needs of local growth, or in connection with local planning schemes. If there is to be some new organ for State action on a national scale in the field of housing, to take charge of the new responsibilities which the State will be called on to assume, any such body will have to work largely through the local authorities, developing the traditional methods of public housing policy, and not breaking entirely away from them to create a brand-new service divorced from local government and controlled exclusively from the centre.

It is much more fruitful to approach the idea of a National Housing Corporation or Commission in quite a different way, and to inquire what such a body could do that cannot be done by the local authorities or by regional groupings of them. It is immediately evident that there are fruitful fields in the organized supply of builders' materials and housing components, in design, and in the relations between the local authorities as bodies needing houses and the building industry as the agent of supply. A National Housing Commission could fulfil a most useful func-

tion by entering into national arrangements with the industries supplying builders' materials and components, planning with these industries to raise the supply of their products to the needed levels and to apply methods of standardization to the optimum extent, negotiating standard conditions of sale and fair margins over reasonable costs of production, and, where necessary, itself placing the orders or undertaking the manufacture in State-owned factories, quarries, brickyards, and the like. The National Commission could become a great wholesale trading and manufacturing agency, carrying out functions in some respects similar to those which the Co-operative Wholesale Society carries out on behalf of the retail Co-operative Stores. It could supply either local authorities, where they were executing work by the method of direct labour, or contractors holding approved contracts from a local authority, at prices and under conditions determined by national arrangement and not by the day-to-day higgling of the market. After arranging with the firms of private suppliers in the industries concerned, it could supplement their resources by standardized production from its own establishments, and it could by these means keep a more effective check on contract prices than would be easy if it had no productive plants of its own. Clearly, a National Housing Commission of this type would be the appropriate body to take over such Royal Ordnance or Agency Factories as were deemed suitable for conversion for the supply of house-building requisites; and the Commission could act in the same way as a supplier and manufacturer of utility furniture for re-sale by local authorities to tenants on their corporation estates.

No doubt, any proposal to constitute a Commission of this kind will be strongly opposed by the whole tribe of private suppliers of builders' requisites, many of whom are even now engaged in making plans for the establishment of close rings to regulate post-war supplies under conditions highly favourable to themselves. These people, however, have no case, except the purely *a priori* contention that the State must on no account enter any field out of which private enterprise hopes to reap a profit. I am not suggesting that the National Housing Commission should set out to drive the suppliers of builders' requisites out of the field, or to establish a public monopoly. On

the contrary, I am proposing that wherever an existing private agency is prepared to offer suitable products at a fair price, the Commission should undertake to buy its output, thus giving it a large assured market. It is, however, clearly out of the question for the existing producers to supply all that will be needed for the extensive building programme of the post-war years; and what I am suggesting is that the additional output needed after full use has been made of efficient units, or units that can be made efficient, in the industries concerned, shall be produced directly under the auspices of the National Housing Commission, which should also be the body to prescribe standards of quality and interchangeability for the components produced by the private firms for use in public contract work.

This, of course, would mean that local builders working on contracts for the public authorities would get their supplies from the National Housing Commission, or from its authorized local agents, who might be the existing firms of builders' merchants working on approved margins. Here again there would be opposition of a familiar sort, based on the fear that the Commission would set itself to bypass the existing trade channels, or to cut out redundant middlemen, or at least to reduce trading margins. It should, indeed, be the policy of the Commission to bring margins down to the lowest practicable point, while using the existing channels wherever they could and would do the work as cheaply as the Commission could do it for itself.

A National Housing Commission, with big orders to play with, should be able to bring down the cost of builders' requisites to a considerable extent, while allowing a reasonable margin to efficient producers and to dealers performing a real service. It could also exert a very large influence on design, and ought clearly to work in very close contact with the Government's Building Research Station and with other research agencies connected with building materials and components. It could do much to promote a more careful study of materials from the aesthetic as well as the economic standpoint, and to reconcile cheapness with good design in the choice of components and fittings. There would be no need for standardization to involve any sacrifice of variety—of real variety, that is, as distinct from mere lack of standards—if the Commission were able to operate

on a large scale. Indeed, in many areas the effect might be to increase variety, by extending the range of choice and by making greater use of the results of research than has been made in the past in the general run of house-building enterprises.

Here, then, is one field in which a National Housing Commission could fulfil an exceedingly useful public function : nor is that by any means the limit of its usefulness. It should obviously work in close connection with the architectural profession and with the various classes of building technicians, setting itself to popularize good designs for houses and auxiliary buildings as well as for components, and promoting experimental and development work as well as research. At the same time, the Commission could exercise additional functions wherever the tasks to be undertaken were clearly outside the capacity of a single local authority or of a closely co-operating group. In accordance with the suggestion made in the preceding chapter it could undertake the entire planning and construction of new towns, or of settlements based on Industrial Trading Estates, setting up for this purpose subsidiary Corporations or Commissions to act under its authority and with finance for which it would be the responsible intermediary between the State and these local bodies. It could hold itself ready to undertake, subject to Government approval, the planning and execution of any projects of development which regional and local planning authorities were ready to hand over to it. It could play a special part in such urgently needed reforms as the improvement of rural housing, and could serve as the State's agent in negotiating with the various public utility concerns about the development of water and power supply, transport development, and other similar matters. For some of these purposes it would need to have its own building department ; but for the most part it would not build, but would either leave local authorities free to place their own contracts or carry on their own building by direct labour, or, where it was itself responsible for the execution of housing schemes, would employ contractors in the same way as local authorities employ them.

Naturally, the National Housing Commission would need to have its own offices and depots at regional centres throughout the country, and to set up regional machinery for the carrying

on of its work in close association with the local planning and housing authorities and with the trades and industries concerned with building and the supply of builders' requisites. It would be practicable to give local authorities representation on this regional machinery, and also to establish regional advisory bodies on which the local industries could be represented. One function which it could most usefully take over would be the co-ordination of building by-laws, so as to bring them into better conformity with the requirements of modern technique and to reduce the bewildering complexity of local differences that has been so great a nuisance hitherto.

Side by side with a National Housing Commission of this type, and working in close association with it, I should like to see a second body, which I will call a National Building Corporation. I envisage this body as made up of all sections of the building industry—employers, operatives, architects, and other professional workers—and as bound together by a common desire to improve standards of performance and codes of conduct in every section. Membership I conceive as entirely voluntary—any firm or individual being free to join or not to join at choice. Those who joined would accept certain special obligations. Firms joining would agree to pay standard rates and to accept standard conditions of employment for their workers, as laid down by the National Corporation; and they would also bind themselves to abide by a standard code of trade practices, to keep their accounts in standard forms, and to throw their books open to inspection both by the National Building Corporation and by the agents of the National Housing Commission, as the guardian of the public interest. In return for the acceptance of these conditions they would receive from the National Housing Commission and from all housing authorities aided from State funds a preference in the allocation of public housing contracts—no public contract above a certain value being allotted to a firm not in membership of the Building Corporation unless it were certified by the National Housing Commission to be in the public interest that such a firm should be employed.

This may appear at first sight a somewhat startling proposal. It is put forward in the belief that, as the State will be compelled to be the principal financier of house-building in the post-war

period, the State has a right to insist that the building industry shall greatly improve its methods and organization, so as to afford both better service to the public and better conditions to the workers whom it employs. There must be guarantees of reasonable quality in the work done, of reasonable prices in relation to necessary costs, of reasonable continuity of employment and of cessation of the gross waste of labour which characterized the building industry before the war. The question is, how can these guarantees best be secured from an industry which is made up of many thousands of units of all sorts and sizes, and of a drifting labour force of which only a minority has any durable attachment to a particular firm? One possible way would be to nationalize the building industry outright, and to organize all building work—except perhaps repairs—as a comprehensive public service under national, regional and local bodies working directly under Government auspices. I do not, however, regard this solution as desirable, at any rate at present, or until an alternative method has been tried.⁹ Building is a highly individual industry, in which there are strong arguments against very big units; and even if there were a great deal of decentralization the danger of top-heaviness would remain. It is greatly preferable, if a sound plan can be worked out, to leave the separate building firms in existence, but so to organize them as to co-ordinate their efforts and to bring their practices into better harmony with public needs.

What I have in mind is that the National Building Corporation, acting where desirable through its own local and regional units, should serve as a body which could, in consultation with the National Housing Commission and with the responsible local authorities, plan the allocation of contracts among its constituent firms, including arrangements for the execution of large contracts by groups of co-operating firms. It should be so constituted as to be able itself to enter into contracts on behalf of the firms belonging to it, and to employ their services virtually as sub-contractors. It should guarantee the quality of the work done by its members, and should have power to expel any firm unable or unwilling to bring its practice up to the requisite standards. In effect, all public housing contracts not carried out directly by the building departments of local authorities or by

the National Housing Commission and its subsidiaries should be placed through the National Building Corporation, whether it executed them itself or passed them on to its member firms.

I have suggested that the National Building Corporation should include operatives and professional workers as well as firms. What I propose is that membership shall be open to all qualified workers and professional men who agree to accept the standard code of conditions, and that firms belonging to the Corporation should give preference in employment to its professional and operative members. In the first instance, in the case of operatives, membership should be open to all men who have either passed through some recognized form of apprenticeship or learnership in a skilled craft, or have worked for so many years as labourers or in any other capacity in the building industry. For the future, boys apprenticed to firms belonging to the Corporation should be enrolled as members and should be apprenticed to the Corporation as a third party, with an assurance that, where necessary, the Corporation would transfer them to an alternative employer. Adult entrants to the industry under the scheme of emergency training sponsored by the Government should be admitted to the Corporation on the satisfactory completion of their period of training ; and it should be open to any worker in the building industry to apply for membership, whether or not he was actually in the employment of a firm enrolled in the Corporation. It might thus happen that there would be operatives, members of the Corporation, working for outside firms, or firms in the Corporation employing non-members. This would necessarily occur if the proportions of firms and of operatives joining the Corporation failed to balance ; but it would in no way upset the working of the scheme.

It would, of course, be important to associate the operatives' Trade Unions with the Corporation, and also to secure the representation on it of the leading professional and technical bodies, such as the Royal Institute of British Architects. The Trade Unions and professional institutions would be the appropriate bodies to help in formulating the codes of conduct and the standard conditions to which everyone associated with the Corporation would be expected to conform.

I hazard the opinion that, if such a body as I propose were

formed and were given a definite preference in the awarding of public contracts, the pressure to join it would be so strong that practically no reputable firm of house-builders could afford to remain outside. The very small jobbing firms, which are concerned mainly with repair work, probably would not join; but, then, the great majority of them never have been connected with the National Federation of Building Trades Employers or its local affiliates. Some firms, concerned mainly with forms of building other than house-building, might remain outside; and so might specialist firms of plumbers, electrical contractors, and other single trades. Even so, the Corporation would become practically co-extensive with the firms engaged in house-building, with the possible exception of some estate development firms working for private agencies and not for local authorities or for the State. Any standard code and set of working conditions prescribed by the Corporation would therefore extend over a wide field, and would speedily dominate conditions over the industry as a whole, except perhaps in the jobbing sections, to which it could probably be adapted without much difficulty at a later stage.

Let us consider now what would be the essential terms of the standard code of practice which the Corporation would be setting out to enforce. In its relations with the public, it would be giving certain guarantees of materials and workmanship which would have to be worked out by expert bodies for each section, acting in close conjunction with the Building Research Station and other appropriate research agencies and institutions. It would have to lay the work of its members open to public inspection in order to ensure compliance with these standards, and to include forfeit clauses in the contracts entered into under its auspices. Its members would have to agree to have their prices scrutinized by the experts of the National Housing Commission, and would be entitled to purchase their materials from that body at controlled prices.

No less important than the code of business practice to be accepted by all member firms would be the code of conditions of employment. There is, I think, no doubt that the first clause of this code should be the acceptance of the 'guaranteed week', including payment for 'wet time'. The guaranteed week is the

principal advantage that has accrued to the workers in the building industry who have been scheduled as engaged on essential work during the war; and there is a very keen desire to retain this concession among a body of men who have suffered as severely as any in the past both from loss of working time due to weather conditions and from discontinuous employment due to bad organization and to the instability of building demand. After the war, with a long-term programme of house-building in view and an acute shortage of labour likely for some time ahead in view of the size of the programme, it should be an easy and not a costly matter to give the building trades operatives a firm guarantee of regular employment—to put them ‘on the strength’, and so to arrange their work as to make a much more continuous and economical use of their labour than most firms have felt it worth while to make hitherto. The Corporation could easily cover this liability by means of a small general levy on the value of all contracts entered into by its members, whereas it would press unduly if it were borne separately by each firm. This has often been suggested in the past as the best means of providing payment for ‘wet time’; and it would be the most sensible course to extend it to cover the whole problem of the guaranteed week, to the extent to which it is felt that this needs to be covered by some spreading of the liability over the industry in general.

What would the building trades operatives be asked to give in return for the guaranteed week and for such guarantees of continuous employment over longer periods as the Corporation, given the assured foundation of a long-term State building programme, should be able to afford? The requital asked of them is substantial: it is their agreement not merely to accept a large infusion of new recruits into their industry under a scheme of emergency training which will cut right across their traditions of apprenticeship, but also to assist positively, to the best of their power, in training the newcomers, in making them at home, and in treating them as equal colleagues. Unless this positive co-operation can be secured, any scheme of emergency training will be bound to encounter very formidable difficulties. It will be impossible, by means of the emergency training course alone, to turn out real craftsmen of high efficiency; for a good

deal of the skill of the building craftsman can be learnt only on the job, and with the help of those who have mastered it already. The workers now in the building crafts are bound, in view of their past experience of unemployment and of under-employment, as well as of sudden reversals of public building policy under the influence of mistaken notions of 'economy', to be initially suspicious of any plan which involves the introduction of a very large body of 'dilutees' to meet the urgent demands of the post-war period: nor will they be reassured unless they can feel reasonably certain that, after this war, the State will persist in carrying out its long-term programme instead of abandoning it midway, or unless they feel that they are being given, in other respects also, a square deal.

The proposal for a National Building Corporation is put forward partly as a way of organizing the industry for the satisfaction of this demand. It must, of course, be taken in conjunction with the proposals put forward earlier in this chapter. The National Building Corporation is not a workable proposition except in connection with a long-term programme of house-building not merely affirmed by the Government—for was not such a programme affirmed in 1918 only to be abandoned in 1921, and affirmed again in 1924 only to be abandoned within a year?—but affirmed in such a way as to give the firmest practicable guarantees of continuity. I am, of course, fully aware that no Government can bind its successor; but it should be practicable, under present conditions, to obtain from the recognized leaders of all the parties a solemn assurance that they mean, as far as the matter rests with them and with their parties, not to go back on what is decided upon, but to maintain a long-term building policy over a period of at least ten or a dozen years, and indeed rather to intensify it than to diminish it should conditions of general unemployment threaten to arise. The proposed National Housing Commission, as well as the National Building Corporation, could then be set up by Parliament on the strength of this assurance; and the powers conferred upon the former body could be designed and its policy developed on the assumption of a continuous long-term programme. This, besides reassuring those engaged in the industry, and making them readier to accept whatever controls may be desirable in

the public interest, will make it very much easier for the National Housing Commission to introduce effective measures of standardization, and to sink capital, or encourage others to sink capital, in improvements designed to raise the quality and lower the cost of essential builders' requisites and components.

In an appendix to this chapter, I have set out a possible Constitution for the National Building Corporation which I have here proposed. The draft is of course tentative, and might need to be amended in many respects; but I wished to give the notion as practical a turn as I could.

So far, I have said nothing of the further notion that the building workers, aided by a sufficient number of technicians and managerial workers, should attempt again what was attempted after the last war—the establishment of Building Guilds through which they would themselves take on public contracts for house-building. I have attempted to relate elsewhere the story of the Building Guilds which ran their course during the period between the conclusion of the last war and the post-war slump of 1921 and 1922.¹ Here I can only repeat very briefly the essentials of what occurred. Under the Addison housing scheme launched in 1919 it was made possible for building contractors to operate with very little capital by getting instalments of the contract price paid to them as the building proceeded, so that the amount of capital which they had to advance out of their own resources, or to borrow from elsewhere, was small in relation to the total sums involved. It was also made possible under the Addison scheme to enter into contracts on a 'cost *plus*' basis, the local authorities, backed by State aid, agreeing to meet the costs incurred, *plus* an agreed percentage, or a fixed sum, to provide a reasonable margin. On this basis, the Building Guilds created under Trade Union auspices in many parts of the country were able to enter into contracts with local authorities, on terms approved by the Ministry of Health, for the erection of groups of houses by co-operative methods, and to use the margin allowed over ordinary costs, not in order to make a profit, but to give to the Guild employees guaranteed conditions of regular employment. The Building Guilds thus worked without profit; and I think there is no doubt that, in

¹ See my book, *A Century of British Co-operation*, published in 1944.

the earlier stages, they built houses of high quality at prices substantially below those which were being exacted by the general run of master builders as long as the boom held. But then, in 1921, came the slump, involving a sharp fall in the volume of private building employment and at the same time a disastrous reversal of State policy. The Addison scheme, which had gross faults, and had allowed a prodigious inflation of building costs, was brought to an abrupt end. That was probably right: what was wrong was that it was not immediately replaced by any alternative plan, despite the urgent need for houses. The 'cost plus' contract was given up; and the Building Guilds found themselves forced, if they wished to continue, to compete with private builders who were scrambling for contracts on terms which required the possession of capital far beyond their slender resources. Attempting to continue, they had to buy from merchants on hand-to-mouth terms and to raise bank loans under unfavourable conditions; and at the same time operatives thrown out of work by the fall in general building activity clamoured, on the strength of their Trade Union connections, for employment under the Guilds. The Guild jobs became seriously overmanned, and costs rose, so that the fixed contract prices which the Guilds had been forced to accept no longer covered them. The Building Guild movement collapsed disastrously, though some of the local Guilds, more prudently conducted than the rest, would have been able to survive if they had not been financially involved in the general *débâcle*.

Should there be, and will there be, a revival in some form of the Building Guild movement after the present war? If there is a guaranteed long-term building programme, the conditions will evidently be more favourable than they were in the years after 1919. But the builders had their lesson in the slump after the last war; and it is most improbable that they will try again unless they are enabled to start out with better financial assurances than they had then. If new Building Guilds are to be brought into being, they must not be left to depend precariously on such bank advances as they can get without being able to offer any tangible security, or on trade credits from private suppliers which almost inevitably involve unfavourable buying

terms. This means in effect that Guilds are unlikely to be started unless the State is prepared to become their financier.

There would be nothing novel in the State assuming such a rôle. Collective contracts with co-operative societies of workmen have been quite a common way of getting public contracts carried out in a number of continental countries—notably France and Italy—for a long time past; and, though there have been no similar contracts in this country, there is nothing at all startling about the suggestion that they might be tried. What would be needed would be some sort of central credit institution, provided with funds from public sources, for making advances to approved Guilds or Guild groups. If a National Housing Commission were set up, it could act as the State's agent for dealing with the Building Guilds; and the Guilds could become members of the proposed National Building Corporation, and could thus come within the terms of the standard code laid down by it and get the same priority as other members in the allocation of public contracts. This, of course, would be unlikely to happen unless the Guilds were set up with full Trade Union support; and there is at present no sign that the Trade Unions have any desire to launch out in this way. They might, however, be visited by such a desire when the moment comes: no one anticipated the rapid spread of the Building Guild movement which occurred after the last war.

Personally, I should welcome such a development, if the financial basis could be made reasonably secure. I think the Building Guild movement of 1919 to 1921 might have been a success if there had been no slump; and if, after the war, we are to have both a general policy of full employment and a guaranteed long-term building programme, I see no reason why a second attempt should not succeed. It would, however, be a mistake to make such an attempt unless two conditions were satisfied—first, that there should be a really keen desire for it among a considerable section of the building workers, and secondly, that the State should be prepared to act as the supplier of capital at reasonable rates of interest.

CHAPTER XII

A SUMMING UP

I HAVE stressed in earlier chapters the impossibility of making any definite estimate of the total building programme that will be needed after the war, both because of the uncertainty of the outlook and because many of the elements of any programme are bound to depend on policy, rather than on calculable facts or tendencies. The most that can be done is to put forward a very tentative estimate of what could be achieved, over a period of years, by a building labour force of a given size. In the Table facing page 260, I have ventured to put forward an estimate of what could be expected from a labour force rising from 700,000 in the first post-war year to 1,500,000 in the fifth year, and thereafter held steady at 1,500,000 for the remainder of a period of twelve years.

Man-hours, or rather man-years, seem to be the only practicable basis for such an estimate. An estimate of cost would be valueless, in view of the uncertainty about both the general level of post-war prices and the particular levels of the various elements of building costs. In taking man-years as a basis, I have started out from the rough assumption that it takes a man a year to build a house—or perhaps I should say that the number of houses built in a year will tend to be equal to the number of operatives employed in building them. I have then, with references to pre-war prices, tried to translate other buildings into terms of houses, and thus of the man-power employed in erecting them. This translation is necessarily very rough, and involves assumptions which are open to question on a number of particular points; but I think the conclusions, though they can pretend to no high degree of accuracy, are not likely to be seriously misleading. It seems to me at least better than nothing, or than any alternative way of arriving at an estimate that is open to me. Man-power is obviously the critical problem; and an estimate in terms of man-power has much more value than one in terms of money.

Strictly speaking, the estimate given in the Table is in terms of the workers *in employment* who would be needed to carry through the programme adumbrated in the previous chapters of this book. It makes no allowance for unemployment, beyond the normal loss of time due to bad weather or other causes which men experience when they are employed. If unemployment were to remain at anything like the pre-war level in the building industry, a much larger labour force than 1,500,000 would be needed to do the volume of work suggested in this book. On the other hand, the Table makes no allowance either for increased or decreased efficiency, or for a possible decrease in the quantity of building labour needed to carry out a given programme on account of transfers of work from the site to the factory and the employment of different types of labour, not drawn from the building industry, on the transferred work. Efficiency will very likely be low immediately after the war (though not so low, one hopes, as in 1919 and 1920), and will thereafter rise substantially above the pre-war level. But no estimate of this factor could have any value; and it has seemed best to treat the possible improvement in average efficiency over the twelve years and the possible decrease in the demand for building labour due to prefabrication as offsets against the absence of any allowance for unemployment. This is, of course, guesswork; but the reader is in as good a position as I am to make any allowances on either side that he may please.

Perhaps I have been unduly pessimistic in assuming that it will take four years to bring the building industry up to the required strength. I hope I have; for anyone who studies the Table will see at once how much that is really urgent has had to be postponed in order to avoid laying too heavy a burden on the industry at the beginning. The crucial factor here is, of course, the supply of skilled craftsmen. There need be no long dearth of less skilled workers within the limits imposed by the total supply of man-power. But efficient building cannot be done without the requisite proportion of skilled workers. This difficulty, it should be noted, does not apply to civil engineering, which is not included in the Table (though the building work proper involved in civil engineering projects is included). There are good reasons for proceeding promptly after the war with

a big quantity of civil engineering work on roads, public utility projects, such as water supply and railway development, and the clearing away of the debris of war; for these will make relatively small calls on skilled building labour, and can be advanced in the early years and then scaled down as the manpower employed in building proper is increased. Moreover, civil engineering, much more easily than building, can be used in a counter-cyclical way, to offset up and down movements in the general demand for labour.

There is, of course, much that is arbitrary in the arrangement of the Table. In relation to housing, it would have been possible to treat the houses built in the earlier years as a contribution towards clearing off arrears and making good bomb-destruction. This, however, would have involved treating the entire current need for new houses as piling up in the form of further arrears to be cleared off later; and it seemed better to begin with an estimate of current needs, and to treat the houses that could be built during the first few years as going towards meeting them, leaving the arrears to be worked off gradually during the later years of the plan. The estimates of current post-war needs have been explained in an earlier chapter. They include, besides provision for additional families needing accommodation and for normal replacements of houses pulled down or diverted to other uses, a number of improvements in housing conditions to which we were in substance already committed before the war, and also certain special allowances which it seems necessary to make. One of these is for the effects of migration and re-planning. It may appear that provision ought to have been made for this during the early years of the plan. But the certain shortage of house-building capacity at that stage puts this out of the question. In effect, the allowance under this head should largely replace temporary houses erected during the first year or two. The second allowance is for the larger houses, for which no provision is made in the general estimate that on the average a man will build a house in a year. Here, again, it seems necessary to put off all building of big houses until the immediate post-war shortage has been at any rate partly met.

It will be seen that the estimate for current needs allows for the building of 4,300,000 houses over twelve years—an average

rate of 358,000 a year. To these must be added the 2,240,000 houses under the second main heading—clearing off arrears and replacing houses destroyed by bombing. This gives an additional 187,000 a year—making a total of 545,000, as against the 630,000 referred to in Chapter VI. If the larger number is to be aimed at, there must be either a larger total labour force, or an increase in building efficiency, or a reduction in some other part of the estimate. I am not suggesting that the rate given in the Table is adequate—only that it is the most we can look for with confidence on the basis of a labour force of 1,500,000. If we can build no faster, we shall have to postpone demolition of a large number of old dwellings which ought to be pulled down.

The estimates for educational building have for the most part already been explained in Chapter VII. The first three items give the demands to which we are in effect already committed to give high priority, either as matters of pre-war policy or under the Education Act of 1944. The fourth and fifth items will unavoidably have to wait a few years; for the improvement of existing buildings, including a sufficient increase in accommodation to make smaller classes possible as soon as teachers can be got, ought to take precedence of both the raising of the leaving age to 16 and an extension of the time allowed for attendance at Young People's Colleges. The sixth item—building for Technical Colleges, Universities and institutions for the training of teachers and social workers—cannot wait. It is indispensable both to the success of the general programme of educational advance and to the development of industrial efficiency. Nor can the seventh item easily be allowed to wait: I have put it back in an endeavour to lighten the burden of the earlier years only because there is already some allowance for it in the estimate under III (a).

In estimating for the fourth and fifth items it is, of course, necessary to avoid overlapping. Young People's Colleges will need more accommodation while the school-leaving age is at 15 than they will when it is raised to 16. I have treated the increase needed for the Young People's Colleges, when attendance is raised above one day a week, as a residual item. That is to say, I have allowed the full amount needed for raising the

age to 16, and have put under III (d) only the residual need for accommodation in the Young People's Colleges after this has been done. If the two reforms are made in the reverse order, the allocation under each item will be changed, but the total of the two will remain approximately the same.

When we come to 'Other New Building' we are in the realm of conjecture. It can, however, hardly be suggested that the allocation under this head is too large. Sixteen per cent. of building capacity is little enough to allow for all the needs of industry and commerce, for public buildings, and for amenity and service buildings of every sort, including those needed in connection with the transport and public utility services. Probably my estimate is too small. It has been based largely on the belief that much war-time and pre-war building in connection with armament-making can and should be adapted to post-war uses; and there is also behind it the notion that in this type of building dilution of labour is easiest, so that it may be practicable to increase the numbers employed in it without making an additional call on the services of skilled craftsmen. It should be clearly understood that the estimate does not include any allowance for construction other than building work in the proper sense. It excludes the demand for civil engineering labour in the construction of transport or public utility undertakings, and takes no account of factory installations, as distinct from the actual buildings. Similarly, it excludes farmhouses and cottages, which have been included with other housing. The provision for agricultural building is meant to cover only productive farm buildings, such as are needed to replace many obsolete structures and to provide for a great advance in milk production and in the scientific breeding of cattle and pigs, as well as in the cultivation of fruit and vegetables, largely under glass, and in food-processing in the rural areas.

For repairs and maintenance, I have taken over the whole twelve years roughly the same proportion—one-third of the whole industry—as was employed on such work before the war, *plus* a special allowance in the earlier years for clearing off arrears. But this proportion of one-third is, of course, out of the question during the early years. The shortage of total manpower will not reduce the need for repairs, which will, on the

contrary, be exceptionally high just after the war. Repair work at the outset will absorb not one-third but more than one-half of the total available supply of labour, even if the catching up of arrears of maintenance is spread over the longest possible period. Here again, however, there is probably room for some dilution of the supply of skilled workers. Repair work, as we have seen, is the particular province of the jobbing small master and the handyman; and it seems likely that there will be a considerable incursion of newcomers into this type of trade in the post-war period, even of persons who have undergone no special training, unless steps are taken to recognize and to organize the handyman and to provide special training courses adapted to his needs. Given such courses, the supply could probably be expanded, without serious loss of quality, faster than I have assumed. If such courses are not provided, the expansion will probably occur all the same, but not without quality being seriously affected.

As for temporary building, it should of course be understood that my estimate relates only to the *building* labour involved, and not to work done either by civil engineering labour in preparing sites or by factory labour in pre-fabricating the buildings. The estimates I have made may appear small; but they allow for a much larger total of construction than is at first apparent.

I have made no attempt to include in the Table an estimate of the labour likely to be needed in civil engineering, as distinct from building. Roughly, I should put it at a quarter of a million workers regularly employed. This is not far off the pre-war total; but as we have seen, civil engineering was in pre-war days the most casual of all industries, and had a monstrously high level of unemployment even in periods of boom.

For building, my figures are for all workers, skilled and unskilled together. We have seen earlier that the normal proportion of skilled workers to the total building labour force is rather over 50 per cent., including the minor crafts as well as the main crafts for which figures were cited on page 121. A total labour force of 1,500,000 therefore means a skilled labour force of something over 750,000, unless there are significant

changes in the proportions of skilled and less skilled workers employed.

One last word. My main purpose in writing this book has been to shed the light of realism on the many projects which are in the air, with the object, not of discouraging the projectors, but of persuading them to think in terms of means as well as ends. There is bound to be a hot contest for priorities in connection with post-war building, even if adequate plans are laid for the expansion of the labour force. My preferences in priorities may not coincide with other people's preferences. Where they do not, I hope I have made it easier for them than it was before to make estimates based on their own scales of values. What is futile is to go about clamouring for everything to be done at once, when it is perfectly plain that there will not be enough building capacity to make this possible. The question is, What can best wait? Various answers are possible; but the least desirable answer is that the rival claimants should be left to a planless scramble for as much as each can get. If that is allowed to happen, it will be impracticable to keep costs down or to raise efficiency high. There must be a plan, as part of and arising out of a general social and economic plan for post-war Britain. This book deals only with one particular aspect of such a plan; but that particular aspect is of crucial importance for the whole.

APPENDIX A

HEADS OF PROPOSALS FOR THE CONSTITUTION OF A NATIONAL BUILDING CORPORATION

1. That a National Building Corporation be constituted, with the following objects :—

- (a) to formulate a code of standard practice to which all firms, associations, and individuals enrolled in the Corporation shall agree to conform ;
- (b) to maintain a register of firms which have agreed to act in compliance with the standard code, and to assure itself, by inspection of these firms' practices and accounts, that the code is actually being observed ;
- (c) to maintain a register of individuals, including architects, managerial and technical workers, foremen, craftsmen, and others connected with the building industry, who agree to abide by the standard code ; and to act as an employment agency on behalf of such registered members ;
- (d) to act as an intermediary between member firms and public or other bodies in the arrangement of building contracts, and itself to undertake such contracts in suitable cases either directly or on behalf of groups of member firms ;
- (e) to negotiate with any board, agency, or firm concerned with the manufacture or supply of builders' materials or requisites, both about prices and conditions of sale and about specifications and standards ;
- (f) to undertake, or to assist or collaborate with other bodies in undertaking research and development work in relation to any matter concerned with the advancement of the science and art of building, the introduction of new methods or materials, the better utilization of labour, the improvement of health conditions, or the promotion of efficiency in related industries and services, including public utilities and town and country planning ;
- (g) to regulate the conditions of apprenticeship and training, and to enter into any suitable arrangements with Schools, Technical Colleges, or other educational establishments or authorities for the improvement of educational facilities for both juveniles and

adults, in the higher as well as in the lower ranges of technical and professional training and education ;

- (h) to act jointly with any other body in any matter in which such action is calculated to further any of the foregoing objects.

2. Membership of the Corporation shall be open, on a voluntary basis, to any of the following :—

- (a) Firms of builders which can show, to the satisfaction of the Governing Board, either that they have on an average usually employed either before or since 1939 more than ten workers, or that they are engaged upon public or other contracts which are likely to cause them to employ more than workers for at least a year from the date of application, and such other firms as the Governing Board may at its discretion admit ;

Provided that no firm shall be admitted to membership of the Corporation unless it agrees in writing to abide by such rules and regulations as the Corporation may from time to time prescribe.

- (b) Architects, quantity surveyors, civil engineers, and other professional workers holding a professional qualification approved by the Board, and agreeing to abide by such rules and codes of conduct as the Corporation, after consultation with any professional bodies concerned, may prescribe ;
- (c) Foremen and other supervisory workers, draughtsmen, clerks, and other non-manual workers who can prove to the satisfaction of the Governing Board that they either hold approved qualifications for work in connection with the building industry, or have in fact been attached to the industry for three years up to the date of application for membership, or were regularly attached to it in September 1939 ;
- (d) Skilled craftsmen who can prove to the satisfaction of the Governing Board either that they have served a regular apprenticeship to a building or kindred craft, or that, without such formal apprenticeship, they have in fact attained to the requisite degree of skill ;
- (e) Apprentices who have either been accepted as apprentices by member firms on the standard conditions laid down by the Corporation, or can prove that they are, or were in 1939, serving an apprenticeship under conditions which the Governing Board is prepared to recognize, including those who have been serving without written indentures ;

- (f) Other workers who can prove to the satisfaction of the Governing Board that they have been regularly attached to the building industry for three consecutive years up to the date of application, or that they were regularly attached to it in September 1939 ;
 - (g) Persons who enter the building industry under any approved scheme of emergency training within five years of the inception of the Corporation, or within such longer period as the Governing Board may determine.
3. The standard code applicable to firms which are in membership of the Corporation shall always include the following provisions :—
- (a) All firms shall agree to keep their accounts in a standard form to be prescribed from time to time by the Corporation and to accept an inspection of their accounts by officers acting for the Corporation, subject to such safeguards as the Corporation itself may lay down ;
 - (b) All firms in membership of the Corporation shall agree to conform to such standards in the materials and components employed in their work as the Corporation may from time to time prescribe after consultation with the Government or with such agencies as the Government may set up for the determination of satisfactory building standards ;
 - (c) All firms in membership of the Corporation shall agree neither to give nor to accept any rebates or discounts involving an obligation to deal only with certain firms ;
 - (d) All firms in membership of the Corporation shall agree to release juvenile workers employed by them whether under indentures of apprenticeship or otherwise for such periods and under such conditions as the Corporation may prescribe for attendance at technical classes and courses or at other courses of further education, and shall, where the Corporation so recommends, meet any charges incurred by their employees in attending such courses ;
 - (e) All firms in membership of the Corporation shall agree to accord to all members of the Corporation in their employment such terms of engagement as will assure them of a guaranteed weekly wage, including payment for time lost owing to weather conditions, and shall also undertake wherever possible to enter into agreements for the continuous employment of such members over longer periods, and for the payment to them in case of illness of additional benefits beyond those payable under any statutory

scheme in accordance with conditions to be laid down from time to time by the Corporation ;

- (f) All firms in membership of the Corporation shall agree to accept apprentices up to an approved number on conditions prescribed by the Corporation and on indentures of apprenticeship entered into by such firms which shall cite the Corporation as a third party to the indenture, and shall be so drawn as to empower the Corporation to take over the apprenticeship and arrange for its completion if, for any reason, it cannot be satisfactorily completed with the firm which was originally a party to it ;
- (g) All operatives, other than apprentices, who are members of the Corporation, shall agree to give the fullest assistance in the training of additional workers entering the building industry under any emergency scheme for the augmentation of post-war labour supply, provided that the terms of training have been approved by the Corporation ;
- (h) All operatives, other than apprentices, who are members of the Corporation, shall agree to accept such conditions of employment, not being inferior to those agreed upon between the Trade Unions and the Employers' Associations in the building industry, as the Corporation may from time to time prescribe. All professional workers who are members of the Corporation shall agree to abide by such standard codes of practice as the Corporation may prescribe, provided that these do not conflict with any conditions laid down by the recognized professional associations of which they are also members.

4. The Corporation shall be entitled to become a party to any National Apprenticeship Scheme that may be drawn up by the industry as a whole, provided that in respect of persons apprenticed to firms in membership of the Corporation, it shall not depart from the principle that the Corporation shall be cited as a third party in any indenture.

5. All firms in membership of the Corporation shall agree to belong to the appropriate Association of the National Federation of Building Trades Employers, or to some other recognized Association of Employers in the building industry, and all operatives who are members of the Corporation shall agree to belong to a Trade Union recognized by the National Federation of Building Trades Operatives. The Corporation shall be further entitled to make membership of an appropriate professional organization a condition of membership for those admitted under clause 2 (b) or 2 (c).

6. All firms in membership of the Corporation shall undertake to give priority of employment to persons who are members of the Corporation, such preference to be subject to reasonable convenience according to rules which the Corporation shall lay down. Any dispute arising out of this provision shall be referred to the Governing Body of the Corporation, whose decision shall be final.

7. All firms in membership of the Corporation, and all operatives who are members, shall, if called upon by the Corporation, subscribe in agreed proportions to a special fund for the purpose of implementing the provisions of rule (3) for the payment of guaranteed weekly wages, including payment for wet-time and for the supplementing of State benefits by additional help in case of sickness or unemployment.

8. Any operative belonging to the Corporation, who becomes an employer or an independent worker, shall, if eligible, be transferred to membership under section 2 (a). If he is not eligible under this subsection, he shall be entitled to retain his membership of the Corporation as long as he remains connected with the industry, but shall not be entitled to any of the preferences described in this document or to any payment from the special fund provided for in section 7.

9. The Corporation shall be administered by a Governing Board representing :—

- (a) the firms in membership of the Corporation ;
- (b) the operatives in membership of the Corporation ;
- (c) all other members.

Each of these sections of the membership shall be entitled to choose its own way of appointing its representatives on the Governing Board. In addition, the Corporation shall invite the Government to appoint members to sit upon the Governing Board of the Corporation in order to represent the interests of the State, the local authorities, and other public agencies interested in its activities. One of the members appointed by the Government shall be chosen as Chairman of the Corporation, and shall give the whole of his time to the work. At least two other members of the Governing Board shall be full-time salaried members, and may be drawn from any section of the Board's membership. The remainder of the members of the Board shall be part-time members, and shall receive no remuneration beyond their expenses. No member of the Governing Board may have any financial interest in any firm connected with the Building Industry which is not in membership of the Corporation.

10. There shall be a Grand Council of the Corporation, consisting of one representative from each local group of firms in membership of

the Corporation, and one from each local group of operatives, irrespective of trade, together with such representatives from other classes of members as the Grand Council may itself from time to time determine. The National Federation of Building Trades Employers and the National Federation of Building Trades Operatives shall also be invited to appoint representatives to sit on the Grand Council, which shall be empowered to make and amend the constitution of the Corporation, but which shall be otherwise an advisory and not an executive body.

11. The Corporation shall be represented regionally and locally by such groups and committees as the Governing Board may decide to set up.

12. The Corporation shall be entitled to tender for contracts, either for direct execution under its own auspices or by way of arrangement for their execution by co-operating groups of firms in membership of the Corporation, and shall be prepared especially to tender for large contracts in connection with the re-building of war-damaged areas, the erection of new or satellite towns or trading estates, the conversion of war factories to peace-time use, and the development of public utility services involving extensive building operations.

13. The Corporation shall be entitled to enter into arrangements with Technical Schools, Colleges and other educational bodies and authorities, for the purpose of providing improved schemes of education, both in subjects connected with building and generally.

14. The Corporation shall be entitled either to conduct examinations for certificates or diplomas for the various types of building work or to enter into arrangements with other bodies for the conduct of such examinations.

15. The Corporation shall be financed by a sum of one penny a week, levied upon each member other than a firm, and, in the case of firms, by a sum of one penny a week in respect of each person employed. In addition, firms taking contracts under the auspices of the Corporation shall pay the Corporation a sum equal to 1 per cent. of the value of such contracts.

16. The Corporation shall be empowered to borrow for capital purposes, and shall endeavour to arrange with the Government for such borrowing to take place through the Local Loans Fund or otherwise, at the lowest practicable rate, up to a total approved by the Government Department or Departments concerned.

17. The Corporation shall establish a Research Department, and shall be prepared to co-operate with other research organizations for the purpose of research and experiment in new forms and methods of construction and in the use of new materials. The Corporation shall be prepared to enter into arrangements with firms or associations of suppliers or with Government agencies for the manufacture and supply of standard materials and requisites to its member firms.

18. The Corporation shall be constituted in the first instance for a period of twelve years, and shall be governed initially, pending the formal adoption of these rules, by a provisional Governing Board to be appointed by agreement between the National Federation of Building Trades Employers, the National Federation of Building Trades Operatives, the Royal Institute of British Architects, and the Ministry of Works and Buildings, or, failing such agreement, by the Minister of Works and Buildings, after taking such advice as he deems appropriate.

APPENDIX B

THE FUTURE OF THE NATIONAL TRUST ¹

WE are on the eve of a period of consciously planned building and development in this country. Already the Government, as an earnest of its intention to proceed with a large-scale building programme, has announced measures designed to raise the strength of the building industry to about a million and a quarter men as speedily as possible after the war. There are countless projects, not only for the reconstruction on better lines of bombed cities, but also for wider measures of urban re-planning and decentralization. Nor is what we have to expect limited to a further spilling out of towns over the countryside, or even to the creation of new towns, based perhaps upon the vast Royal Ordnance Factories and other war establishments that have been built up on land previously in agricultural use. Agriculture itself and the life of the countryside are also marked out for reconstruction. Some permanence is expected in the increased home production of foodstuffs, though no one yet knows to what extent it will continue or reverse war-time tendencies; and in addition we stand committed to a policy which will raise the utilities and amenities of country living, for the mass of the country population and not merely for a few, to a standard which will be acceptable as conforming to the needs and desires of the times.

Are these great projects of reconstruction, in town and country alike, fuller of hope or of menace to those of us who have placed some portion of our faith in the activities of the National Trust? From the standpoint of 'historic interest' or of 'natural beauty', would we rather see our country let alone as it is, or developed as a consequence of reconstruction policies in which neither 'historic interest' nor 'natural beauty' can be expected to occupy more than a secondary place? If we were to envisage reconstruction after this war as simply a repetition of what occurred after 1918, we should have to look forward, from the two angles of purpose which primarily concern the National Trust, with much more fear than hope; for despite the steadily growing activities

¹ In 1943 I was invited to deliver an address at the Annual Meeting of the National Trust for Places of Historic Interest or Natural Beauty and to devote my time to discussing the position which the Trust ought to occupy after the war and, in particular, in relation to the State in connection with post-war planning for the control of land. I here re-print my address just as it was delivered: a much shortened version was published in *The Fortnightly* for October 1943.

of the Trust itself and the greater articulateness of public opinion on its side, the period between the two wars was dreadfully fertile in destruction. It became, perhaps, harder than it had been earlier to pull down an ancient building really remarkable for beauty or historic interest, at any rate of certain kinds; but, as against this, it became even easier to ruin large stretches of the countryside. The more roads the State built, either because someone wanted them or because they were a fairly simple way of finding work for the unemployed, the more of the countryside was laid open to spoliation. Road construction lowered the costs of the housing speculator by saving him part of the expense of development; and there was so much joy over a building craftsman back in employment that few paused to inquire how much damage he was doing. Higher standards of space for housing aggravated the problem in one way while lessening it in another. It became possible to build better towns and settlements from the standpoint of healthiness and living amenity; but this meant that they spread over a greater space, and, as they were built usually without even the semblance of a unifying plan, that they spread more widely the devastation of natural beauty. Aerodrome construction, when it came, added its quota, particularly at the expense of good agricultural land; and now have been added vast army camps and the square miles of the great war factories. Much of this litter of war may be removable, though a good deal will be thoroughly removable only at heavy expense, and it by no means follows that everything which is removable will be removed. Some will be irremovable; and some we shall not be able to wish to remove, because development must proceed somewhere, and it may often be best as well as most economical to let it proceed on sites that have already lost much of their original character, rather than to set about devastation of new places while we are painfully restoring those which have been devastated already.

I am not suggesting that we should plant our new after-war towns on the sites of war factories or army camps unless these are, on economic grounds, the best places for them. There is, however, good reason for supposing that some of them are the best places for developments planned to relieve the congestion of older urban centres or to afford space for the construction of up-to-date factories in healthy and pleasant surroundings. After all, a good number of these war factories were put where they are for the purpose of employing labour which could be drawn to them from industrial centres not too far away, and are therefore capable of serving this purpose in peace as well as in war. Moreover, the engineer in search of a suitable site for a vast factory or camp is more likely than not, if he does his job well, to pitch on a site that will be suitable also for a town, except where for security reasons he has to

tuck his factory away in some exceptionally remote spot. I am sure that the Government ought now, through some appropriate agency, to be taking a careful census of every big war-time factory, camp and aerodrome, studying the possibilities of each as an after-war centre of industry and regular population and of tourist trade—for in view of the coming extension of paid holidays we shall need a great number of new tourist centres—and making plans, here for the restoration of a site to agricultural uses, here for industrial and residential development, and here for use as a holiday centre, a school camp, a settlement for the health-giving employment of the tuberculous, or some other community purpose. Moreover, every such survey should include, as one of its essential features, a study of the area surrounding the projected settlement, with the object of securing the preservation not merely of a 'green belt' but also of such places of historic interest or natural beauty as should be made, as far as possible, the permanent possession of its future inhabitants.

One thing sharply differentiates the development which we are expecting after this war from that which took place between the wars. We expect the new development to be, up to a point, *planned*, though we are far yet from knowing to what point the planning is to be carried. We do not yet know, either what powers the State will take to control the use of land, or through what regional and local agencies such powers as it does take will be exercised. We do not know how far the powers taken will in practice be stultified, as were the powers given to control ribbon development and, largely, the wider powers of town and country planning, by unworkable provisions for compensation or by inadequate financial aid to the poorer localities or regions. Nor do we know what the State itself intends to do in the spheres of action which come closest to those of the National Trust. Public forestry policy is still unsettled: projects for National Parks are many, but have not yet taken definite shape or received official sanction: National Camps, Camping Sites, and Nature Reserves are still at the stage of talk; and finally, we do not know how the law will stand after the war in respect either of the taxes upon land and inheritance or of the conditions attaching to 'covenants' of various kinds. In effect, we are not aware whether 'planning' is to include any large element of planning for beauty and the conservation of tradition enshrined in places of beauty or historic interest: nor—what is very pertinent—are we aware whether the State proposes to assume, mainly for economic or social reasons, powers which can be used for these purposes, even if the main driving force behind them is something different.

These obscurities about the future make it inevitably difficult to foresee what is likely to, or what ought to, be the position and policy of the

National Trust in the period after the war. There will be some who will hold that, if the State does what it should do, as the guardian of the public interest and of the glories of our national traditions, there should be nothing left for the Trust to do, and it had better be wound up and its functions transferred to a regular department of State. I should not be of this opinion, even if I thought it likely—as I do not—that on the morrow of the war all the land of England and Wales would become public property. Land nationalization would, no doubt, change profoundly the work of the National Trust; for even if it were left, under the State, in possession of its existing properties, there would be no source, except the State, from which it could acquire more land. It would, however, remain open to the State to hand over to its administration land deemed worthy of special preserving care; and, unless the State were to take over the buildings as well as the land, one important part of the Trust's activities would clearly need to go on.

I do not propose, however, to consider this possibility; for a Government which has shown so much hesitation in going to the point recommended in the Uthwatt Report—acquisition of development rights in undeveloped land—is most unlikely, having taken thought, to go to a length which the Uthwatt Committee itself regarded as politically impracticable. We have to make our after-war plans on the assumption that most of the land-surface of this country is likely to remain in private ownership, subject to a greater or smaller element of public control over the development for other than agricultural uses of land not yet built over, and to a substantial amount of control over building in existing urban areas—including, one may hope, control of what may be demolished as well as of what is allowed to be built.

Where, under the conditions set forth in the Uthwatt Report, would the National Trust come in? Pretty much where it comes in at present; for the acquisition by the State of development rights would not affect the ownership of the land unless and until actual development of it was proposed: so that the need to protect properties against development would exist exactly as it has existed hitherto, and the only difference would be that, the State having already acquired the development value, the Trust would presumably be able to purchase properties deemed to possess such value at a lower price. Moreover, some land-owners, receiving payments from the State for development rights, might be in a better position than they are at present to hand over properties to the Trust with some endowment for their maintenance. In itself, the adoption of the Uthwatt proposals for undeveloped land would facilitate the operations of the National Trust by removing the owner's interest in potential development value and providing him with

ready money in return for a potential asset on which, maybe, he had no intention of realizing.

Much more hangs, however, on the future of the legislation governing Town and Country Planning. If there are brought into existence for after the war real Regional Planning Authorities, with executive powers and financial resources of their own, and with aid from national funds, such bodies will obviously be expected to play some part in the preservation by constructive as well as preventive measures of places of natural beauty, and perhaps of places of historic interest as well. It will presumably become a part of the duty of regional planning bodies, not merely to prevent development where it ought not to be allowed, but also to provide in a positive way for the needs of their citizens for the enjoyment of open and accessible countryside. They will thus tend to do, on a larger scale, a part of the work which the Trust has hitherto undertaken; but it is unlikely that their activities in protecting and providing 'beauty spots' will extend, save in a limited way in connection with 'green belts', to buying and protecting properties which are destined, not for use as parks or open spaces for public use, but for letting out to farmers on conditions which will ensure the maintenance of their natural beauty or traditional character. There is, to be sure, no absolute reason why regional or local public authorities, given wide enough powers to acquire land, should not undertake these tasks. But in practice for some time to come the regional and local authorities are likely to have enough on their hands without attempting much of this sort, even if they are allowed by law to attempt anything. This suggests that there will be need for very close co-operation between the National Trust and the regional and local planning bodies, and that the Trust will often be in a position to rescue from ill-usage land in the neighbourhood of parks, open spaces, and other reserves acquired by public bodies, as well as to aid local action by acquiring places of historic interest and putting them into order, and also by carrying further its recent policy of arranging with landowners for protective covenants safeguarding rural beauty without any change in the legal ownership of the land concerned.

This problem, of the place of voluntary bodies in relation to public authorities operating over a wider sphere than in the past, is already coming up for adjustment in a wide variety of social spheres. It arises in connection with Youth Movements, with Adult Education, with the various agencies concerned with the encouragement of music and the other arts, with social service in all its manifold and rapidly changing activities, and in a number of other connections. In all these fields, there are some who maintain that as the range of public action is widened the range of voluntary action is bound to be narrowed, and that it is the

destiny of voluntary movements, having prepared the way, to give place to compulsory services organized directly by the State or the local authorities. It is, however, surely the better view that, for as far ahead as it is profitable to attempt to look, there will be in most fields of social action no dearth either of new experiments which can best be tried out on a voluntary basis, or of gaps in the public services which voluntary effort will be called upon to fill. This is certainly the situation in the field of Adult Education, which I happen to know best; and I feel fairly sure that it will be the situation in most of the fields of action in which the National Trust has experimented, or is fitted to experiment in future.

What generally happens, however, as the public authorities widen their range of action, is that much closer co-operation comes to be needed between them and the voluntary bodies already at work in the several fields which they invade. There have been, of course, many examples already of fruitful co-operation between the National Trust and the local authorities interested in this or that particular scheme—in the Manifold Valley, for example, and, more recently, in connection with the use to be made of historic buildings, such as Eastbury Manor House. There should be much more co-operation of both these kinds in future—probably with a somewhat changed division of labour and function. Plans for the acquisition and putting into order of historic houses could be made much better if, from the outset, the Trust in taking them over could do so with a definite arrangement with a local authority for their future use already in view; and, in the preservation of such areas as Dovedale or Lakeland, the major place could be assumed by the public authorities responsible for the planning of amenities, with the National Trust coming in to round off the value of the schemes by taking over properties still to be left in private occupation, or acquiring pieces of property which, for one reason or another, it seemed difficult for the public authority to buy—for example, where a parcel of land essential to a particular scheme happened to fall within a different planning area.

Of course, in as far as the acquisition of land in such areas as Dovedale or Lakeland comes to be the business of a national, as distinct from a local or regional authority, the situation will be somewhat different. If National Parks are to mean considerable areas taken over, owned and administered by a National Parks Commission financed from public sources, there will come into being a branch of the State machine doing, side by side with the National Trust, something which the National Trust has had to do by itself in the past, in default of action by the State. This will give rise to complications which will need to be faced if such an agency is created. I find, however, that some at any rate of the pro-

tagonists of the idea of a National Parks Commission appear to have in mind a body that will own no property at all, but will merely exercise a general supervision over what is done by private owners in certain scheduled areas—a sort of planning authority created to exert, for a few areas of special beauty or amenity value, powers analogous to those of regional planning authorities under the Town and Country Planning Acts. I confess that I can see little value in bodies of this kind, unless they are empowered to take over and administer as public property considerable tracts of land. A national park must surely belong to the public, even if certain parts of it are left in private occupation. If there is to be a separate authority entrusted with the supervision of National Parks, let there be real National Parks for it to administer, and let the complications involved in its relations with the National Trust be fully faced.

I do not see why, after all, the difficulty of facing them should be very great. Tidiness and uniformity are not the qualities most to be desired in a policy for the conservation and development of natural beauty. It might be an excellent thing if, in Lakeland or in West Wales or in Norfolk, there were park areas of which some parts were under the National Trust and others under a Commission set up by the State. It would, no doubt, be necessary for the two agencies to follow in certain matters a common policy; but within this general agreement there would be room for considerable differences in method and objective, and such differences could, I think, be of positive advantage in a field in which taste and appreciation are bound to count for so much. In particular, I feel sure that in most cases covenants with private owners, even in areas specially scheduled for preservation, would be better and more elastically negotiated by the National Trust than by a body acting directly as the representative of the State.

This brings up a further question on which there is certain to be much difference of opinion. How, if at all, ought a National Parks Commission to be related to other public or semi-public agencies established for achieving the right use of land under non-profit-making conditions? I am thinking now of the Forestry Commission, or of whatever body may succeed to its functions, of the National Camps Corporation, or its successor, and of any body that may be set up for the creation and control of special Nature Reserves. How should such bodies, with different but not unrelated objects, be interconnected both one with another and with the National Trust?

Forestry policy raises, of course, issues much too large to be properly discussed here. Forestry is a business, and with the Forestry Commission business considerations are bound to weigh in the aggregate more heavily than any others. This does not mean that forestry is bound to

be carried on, by the State any more than by the owners of private woodlands, in disregard of beauty or amenity; but it does mean that it would be unreasonable to expect the Forestry Commission to be the right body to take primary responsibility for anything except its main task, which is in all conscience big enough in face of the destruction wrought by this war before that wrought by the last has been nearly made good. It seems clear that, in addition to greatly enlarged planting operations on public land, it will be necessary in future to pay much more attention than has been given so far to the state of private woodlands, and that some considerable system of continuing subsidies under supervision will be needed. At this point as well as in its own planting policy the Forestry Commission, if it is given this task, will necessarily have a large share in the responsibility for the beauty of the countryside; and it would seem to be good sense to have among the members of the Forestry Commission at least one who would make this responsibility largely his own, and would serve as a link between the Commission and the National Trust and other bodies concerned with the preservation of rural beauty. Of course, in a sense rural beauty depends even more on the right conduct of agriculture than of forestry; and ugly farm-buildings and unkempt fields can disfigure a countryside as much as decaying woodlands or inappropriate plantings. But the forestry problem is the more compact and manageable of the two; and the link is easier to make between the Forestry Commission, as a public body, and the National Trust than between the Trust and the countless independent agencies responsible for agricultural practice.

The Forestry Commission touches the question of rural amenities at another point; for it may come to have on its hands much land designed to be planted, if at all, only over a long period of years, and available meantime for public use. Very careful consideration should be given to the future relations between the Forestry Commission, the National Trust, the National Parks Commission, if it comes into being, and any national body that may be given charge of the development and care of camps for schools, for youth, and perhaps for communal forms of holiday-making for the general population. There will be large tracts of relatively empty country, for the most part not highly fertile but including fertile oases, which will need to be developed from the three distinct points of view of afforestation, preservation and improvement of natural beauty, and use for recreative purposes. Each of these forms of development will need to be mainly under the care of a body which will put its claims first, though without ignoring other claims; and in such areas as West Wales, the Lake District, and the Scottish Highlands the plans will not work out aright unless the three types of body—and there may be more than one of each type—are acting to-

gether in very close collaboration, with a great deal of give and take. This suggests to me that the Forestry Commission ought to be neither a quite independent body nor linked up with the Ministry of Agriculture, but rather attached, with the body or bodies in charge of National Parks, National Camps and Camping Sites, and the preservation of places of historic interest and natural beauty, to a special section of the new Ministry of Town and Country Planning. This would link all these agencies with the Ministry which will be responsible for co-ordinating and influencing the town and country plans made under regional or local auspices; and it will be altogether a more hopeful arrangement than one which would leave these matters under independent and quite separate bodies, jostling for room, or would attach each of them to a separate Government department and thus hold them even more firmly apart than if they were left free to make their mutual accommodations on their own.

In all that I have been saying so far, I have assumed that there will remain after the war a large place for the operations of the National Trust as a voluntary body standing outside the machine of government. But what, I shall be asked, are the prospects that such a body as the National Trust will be able to raise any substantial sum of money for continuing and extending its operations under the after-war conditions of taxation and of the distribution of incomes? This clearly raises a very real problem. It has been the policy of the Trust hitherto to finance its operations, first, by building up a nucleus of revenue from subscriptions sufficient to meet its administration charges and to enable it to carry out small purchases and improvements out of its own resources. For larger purchases it has relied on public appeals and, to an increasing extent, on subventions to its projects from the local authorities in the neighbourhoods which stand mainly to benefit from them. In accepting gifts of property involving subsequent costs of upkeep and improvement it has sought, wherever possible, to ensure either that the revenues accruing from the use of the property shall be sufficient to meet these charges or that the gift shall include an endowment fund of adequate amount. These desirable conditions have not always been met in practice; and where they could not be met the Trust has had to rely on large sums of free money received in legacies from a few notable benefactors—legacies which could be used either in contributing towards the purchase money needed for major schemes financed partly from other sources, or in making it possible to accept gifts which would otherwise have had to be refused for lack of means of maintaining or improving the properties so acquired.

How far is it likely that these methods of financing the Trust's work will remain open after the war? The chief doubts are, first, whether

many owners will be in a position to hand over properties accompanied by adequate endowments, and, secondly, whether free money from unearmarked legacies will be forthcoming on the scale necessary to bridge the gap. There will probably be more owners ready to hand over properties which the Trust would wish to accept if it could see its way clear, but fewer able and willing either to endow such properties or to bequeath or give free money on a large scale. It seems likely that there will be more properties offered to the Trust, and smaller means of accepting them.

My own feeling is that the State ought to be prepared to go a long way towards filling in this gap. I should like to see an arrangement under which the State would hand over to the Trust, say on a pound for pound basis, money to match all money given to the Trust from private sources, including the estimated money value of properties given by the owners—the State grants to be applied in the first instance to meeting costs of upkeep and improvement, and thereafter to the acquisition of further properties or the improvement of properties already in the hands of the Trust. I do not see why such an arrangement should involve any sacrifice of the Trust's independence; and I regard it as a perfectly legitimate way for the State to spend money on preserving the national inheritance. This method of grant aid would be analogous to what has been done already in giving State aid to the National Council of Social Service and to certain forms of Adult Education as well as in connection with the pre-war 'National Fitness' campaign.

In particular, this method would enable the Trust to go a good deal further than it has been able to go in acquiring by gift houses of architectural beauty and/or great historic interest. There should be many chances after the war of acquiring country houses, including small and beautiful manor houses, in this way; and there will also be great need for the Trust to be ready to acquire by purchase urban buildings threatened with demolition regardless of their beauty and historic value in connection with the re-planning and re-building of towns. Experience has shown that it is utterly unsafe to trust town-planning authorities elected on a quite different mandate to pay adequate attention to the preservation of ancient or beautiful buildings. Some such body as the National Trust will be urgently needed to step in and acquire what is best worth keeping, and to fight with all its strength against local influences which are set on making a clean sweep of a beauty that they have no eyes to see.

It is, as the Trust has recognized, of the greatest importance that, wherever possible, a beautiful or historic building taken over by it shall not thereafter be left as an empty shell. Beautiful and historic buildings ought to be used—in a few instances as museums, but mainly

for men's current affairs. The difficulty about this is that use generally means heavy capital expense in making the building usable without damage to its architectural quality, and that it may be difficult to find money for such purposes or, even if it is borrowed, to cover it by rent charges. Public grants should be available for covering deficits of this kind, both for urban properties and for country houses taken over by the Trust; and there should be collaboration between the National Trust and local or special Trusts which have in their charge particular houses or properties which they are often but poorly equipped to maintain.

Often, it is objected that it is difficult to find suitable uses for country houses thus acquired. They are apt to be either too big or too small, where they possess the architectural qualities which make them eminently desirable as public possessions. But a great new field for the use of such properties will, I believe, be opening up in the after-war period. In my opinion, every urban school should have attached to it a school building well away in the country. Every child's education should include a period—perhaps at least a year—of boarding education; and it should always be possible to send to school in the country children who for reasons of health or unsatisfactory home conditions are likely to be the better for it. Such attached 'country schools', not being complete schools, would not need in most cases to be large; and in their grounds could be erected simply designed camps, so that in the summer months a large part of the school's activities could be transferred from town to country. Many a beautiful manor house would serve such a purpose admirably; and this is only one among many social uses to which such properties could be put.

It may be argued that such places for use as schools or for other similar purposes ought to be acquired by the local authorities themselves. So, no doubt, they ought, except where they are places of special beauty or interest. But, where they are, will it not be better for some such body as the National Trust to act as responsible owner, to carry out the necessary adaptations, and to let the building rather than alienate it permanently? I, at any rate, believe that it will.

There is much more that I should like to say; but I have exhausted my time—and perhaps your patience. Let me sum up by repeating that I am sure it would be a calamity if, in our desire to see the State do directly much more for the preservation of places of natural beauty or historic interest, we were to lean over into the belief that the State can do everything that is needed. There are always limits to what the State can do best, even if these limits are always, in a healthy society, being advanced. Each advance in State action creates new practical possibilities for private action; but, at the same time, the nature of this

private action changes. To an increasing extent the voluntary body, instead of doing what the State is *not* doing, comes to be doing what the State *is* doing, but to do it in a less fixed and more pioneering and experimental way. With this change goes a change in relations. The private bodies can no longer act apart from the State: they have increasingly to act in collaboration with it. Nor can the State any longer regard the financing of the private bodies as purely a matter for private effort. It has to come to their aid, supplementing what they can raise privately with help from public sources. This help can be justified, as soon as the State comes to think of the work of the voluntary bodies not as something purely private, which is none of its concern, but as an indispensable element in the social activity of the people—essentially a form of communal, though not of government, enterprise. This, I am sure, is how the work of the National Trust ought to be regarded in future, and to be fitted into the after-war pattern of physical planning and town and country development. This, I believe, is what the founders of the Trust would desire, if they were young now; and I want my last word to be that voluntary bodies, among which the National Trust occupies so honourable a place, can hope to remain alive and to adapt themselves successfully to new situations as they arise only if they take a positive, and not a merely conservative, view of their functions. What we call ‘natural beauty’ has in fact to be created, as well as conserved. Many of the landscapes which we most admire to-day we owe, not to nature alone, but to the foresight, extending over generations, of the great gardeners and foresters who made the parklands of our country houses, large and small. Our age, like theirs, needs to plan beauty for the future, as well as to preserve that which already exists; and this the National Trust must set out to do in accordance with the standards and values, not of some past period, but of to-day. In order to achieve this, the National Trust and all other bodies which aspire to play a part in this field of social enterprise must be so constituted as to give youth, as well as experience, a prominent place in their counsels. I hope you will not mind my saying that this is to-day the Trust’s greatest weakness. In the hope of holding its standards high, and in the light of its special mission to preserve what is old and good, it has tended to shut its doors on youth. Believe me, a very few wise old men can keep quite a number of younger men fully enough in order. The more the National Trust needs to look back, the more should it look forward too. If, in this coming time of change, it allows itself to become only a guardian of the past, it will be swept aside. Its mission is to link the past to the future; and for that it needs the men who are attempting new things as well as those who rightly reverence the beauty of the past.

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